

20 Years of Dne Country, wo Systems" In Hong Kong

Gaokao: 40-Year-Old Turning Point China's Antarctic Activities



邮发代号2-903 CN11-1429/Z USA \$5.10 UK £3.20 Australia Europe €5.20 Canada \$7.80 Turkey 国内零售价:10元

\$9.10 TL.10.00



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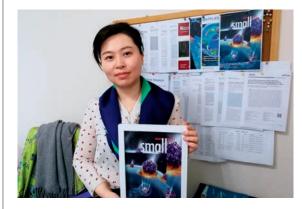
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JULY 2017

Administrative Agency: 主管: 中国外文出版发行事业局 China International Publishing Group

Address: 社址:

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> Remittance to: 邮购收款人: Publishing and Distribution Department, China Pictorial 人民画报社出版发行部

Legal Adviser: Yue Cheng 法律顾问: 岳 成

Printing: Toppan Leefung Changcheng Printing (Beijing) Co., Ltd. 印刷:北京利丰雅高长城印刷有限公司

Overseas Distribution:

China International Book Trading Corporation (Guoji Shudian), 35 Chegongzhuang Xilu, P.o. Box 399, Beijing 100044, China Telephone: 86-10-68413849 Fax: 86-10-68412166 China Book Trading (Canada) Inc. Telephone: 1-416-497-8096

> 出版日期 每月1日 国内刊号: CN11-1429/Z 国际刊号: ISSN0009-4420 京海工商广字第0121号

In China, subscriptions are available at any post office.

Subscription and distribution agency in Hong Kong, Macao, and Taiwan: Hong Kong Peace Book Company, Ltd. 17/F., Paramount Building, 12 Ka Yip Street, Chai Wan, Hong Kong

> Visit China Pictorial on the Internet: www.china-pictorial.com.cn



Publisher: China Pictorial Publications 主办: 人民专业社

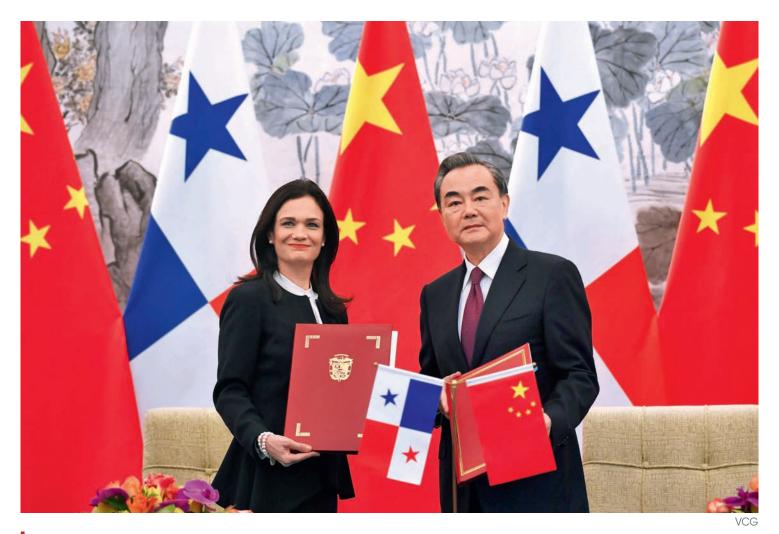
(中国国际出版集团)

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[] News



China, Panama Forge Official Ties

June 13, Beijing: Chinese Foreign Minister Wang Yi and Panamanian Vice President and Foreign Minister Isabel de Saint Malo (left) pose with their documents after signing a joint communiqué on establishing diplomatic relations. China and Panama announced the establishment of diplomatic relations, as the Central American country cut its "diplomatic ties" with Taiwan. According to the statement, the Panamanian government now admits that there is only one China, that the government of the People's Republic of China is the only legitimate government representing China, and that Taiwan is an integral part of Chinese territory. "This is a historic moment, and the China-Panama relationship has opened a new chapter," Wang said. Both sides will make full use of their complementary advantages and conduct cooperation in various areas including trade, investment, maritime affairs, culture and education, as well as tourism.



by Liu Shiping/Xinhua

Exploring the Deep Ocean

June 13, Yap Trench, West Pacific: Jiaolong, China's manned submersible, surfaces after a dive, completing the third stage of the country's 38th oceanic expedition.

After each dive, the crew of the submersible brought back many intriguing photos and videos of sea creatures and underwater geography, as well as samples of seawater, sediment, rocks and deep-sea life, which can yield a better understanding of how organisms adapt to and live in extreme environments.

The expedition, which began on February 6, was the longest yet, and included the most missions for Jiaolong so far. The first two stages took place in the Indian Ocean and the South China Sea respectively, earlier this year. Named after a mythical dragon, Jiaolong reached its deepest point of 7,062 meters in the Mariana Trench in June 2012.

[] News



Strong First Year

June 16, Shanghai: Fireworks dazzle crowds at Shanghai Disneyland, in a celebration of the theme park's first anniversary.

U.S. entertainment giant Walt Disney looks to have hit the ground running in the world's largest consumer market, with Shanghai Disneyland on track to break even in the first year of operation, CEO Robert Iger said. In its first year of operation, the resort has welcomed more than 11 million visitors. As a result of the huge tourist flow and strong consumption, Shanghai Disneyland has had a boost in its upstream-downstream industries, ranging from travel and accommodation to catering and retail.

Having found popularity with guests from across China, the resort has already announced its first postopening expansion, a new, immersive land themed around the Toy Story franchise, set to open in 2018.



Commemorating the Sage Confucius

May 26, Qingdao, Shandong Province: Actors perform a dance during the opening ceremony of the Confucian Temple in Jimo, held to commemorate the ancient Chinese philosopher.

The Confucian Temple in Jimo was destroyed by war in 1929. The reconstruction project started in January 2015 and finished in August 2016. To celebrate its opening, about 120 people from all walks of life attended the ceremony. Confucius (551-479 B.C.), an educator and philosopher, has been deified as a great sage of ancient China and is new recorded as a sumbal of China's traditional culture. Bituals to compare the Confucient started in Arg. B.C.

now regarded as a symbol of China's traditional culture. Rituals to commemorate Confucius started in 478 B.C., the year after his death, and have now been held for more than 2,000 years. Now, the annual grand ceremony to commemorate the sage has been nominated by UNESCO as part of China's intangible cultural heritage.

[] Comment

Belt and Road Prosperity for SCO

n June 9, 2017, Chinese President Xi Jinping attended the 17th meeting of the Council of Heads of State of the Shanghai Cooperation Organization (SCO) in Astana, Kazakhstan, and proposed building a community of shared future through construction of the Belt and Road. The summit has charted the course for the SCO by clarifying the current situation facing the organization, as well as its new tasks.

The summit witnessed a milestone event: India and Pakistan became new members of the SCO. As its membership grows, the SCO now covers not only Central Asia but also South Asia, West Asia and the Indian Ocean region, with the combined population of its members rising from 20 percent to 40 percent of the world's total, and the GDP of its members from 16 percent to over 20 percent. The SCO now includes four nuclear nations. which shoulder a critical responsibility to maintain world peace. The inclusion of new members will promote coordination between the SCO and BRICS countries and help form a new platform for constructive dialogue between China, Russia and India.

The inclusion of India and Pakistan, however, also means future challenges for the SCO. First, the border conflict between India and Pakistan will be the biggest uncertainty. Second, the SCO's principle of consensus through consultation in decision making could be challenged. Third, more responsibility will come with increased international influence resulting from the expanded geographic and demographic range, so the SCO members must better develop their economies and benefit their peoples. Finally, greater misinterpretation, doubt and vigilance against the SCO could arise in the West.

President Xi declared at the summit that the Shanghai Spirit has inspired a strong sense of solidarity, which ensures the growth of the SCO, and that where there is solidarity, happiness will follow. Aiming to convert challenges into opportunities with persistent solidarity and coordination, the SCO members, old or new, should stick to the Shanghai Spirit and conform to the *Charter of the SCO* and the *Treaty on Long-term Good Neighborliness*, *Friendship and Cooperation*.

The Belt and Road Forum for International Cooperation, held in China this May, was an overwhelming success. Construction of the Belt and Road is facilitating coordination of development strategies between the SCO members, such as the Eurasian Economic Union, headed by Russia, and Kazakhstan's Bright Road. China's cooperation with Russia and Kazakhstan has set a good example for other SCO members and observer states. The SCO has become a major platform for Eurasian countries to coordinate development strategies and jointly build the Belt and Road. India is expected to endorse the Belt and Road Initiative after its inclusion in the SCO alongside Pakistan, which will amplify development strategy coordination among countries along the Belt and Road routes.

The Belt and Road Initiative will accelerate multilateral cooperation between the SCO members via signing and enforcement of an SCO trade facilitation agreement, the formulation of a plan for coordinated development of highroads among SCO member states, and the establishment of a mechanism for sub-national cooperation. In addition, alliances will be formed in the fields of e-commerce and economic think tanks, and the establishment of the SCO Development Bank will be explored. The Belt and Road Initiative creates opportunities for the SCO to thrive, and plans and measures for cooperation will push forward integration of the SCO.

President Xi also noted that security is a prerequisite for development, and that without security, there will be no development to speak of. Since last year, violent terrorist attacks have been frequent in Europe, and terrorist forces including ISIS are expanding, which has resulted in mounting pressure and increasing challenges for SCO member states. China advocates the signing of the SCO Convention on Combating Extremism, which will help curb the expansion of extremism, and make security cooperation and coordination between the SCO members more efficient. China is willing to host the SCO joint counterterrorism cyber exercise again and to hold a defense security forum.

China supports the SCO speaking with one voice on international and regional issues, which will help the organization play a bigger and more constructive role in international affairs. The SCO members will deal with challenges through joint efforts and build a common home of security and stability.

The author is executive director of the Center of SCO Studies under the Chinese Academy of Social Sciences.

[] Buzzwords

类脑智能 **Brain-inspired Intelligence Edited by Li Zhuoxi**

rain-inspired intelligence refers to a next-generation artificial intelligence (AI) system modeled to mimic human brain behavior using neural structures and an information management scheme. It's a revised AI system simulating human thinking through the study of the human brain.

Intelligentization has become the goal for the next step of the technological progress, and the human brain has become the holy grail of AI. The development of brain-inspired intelligence could help humans learn how the brain handles information, which could in turn inspire drastic improvement in a wide variety of fields.

China established its first statelevel brain-inspired intelligence engineering laboratory, the National Engineering Laboratory for Braininspired Intelligence Technology and Application (NELBIITA), in Hefei, capital of Anhui Province,

through joint efforts from Fudan University, Shenyang Automation Research Institute under the Chinese Academy of Sciences (CAS), the Micro-electronics Research Institute under the CAS and Baidu Inc., under the direction of the University of Science and Technology of China (USTC).

The laboratory specializes in research on the human brain mechanism and developing AI technology, using the human brain mechanism as a reference point to improve emerging industries such as braininspired cranial nerve chips and brain-inspired intelligent robots.

According to Wu Feng, director of the NELBIITA and executive dean of the School of Information Science and Technology under the USTC, the development of braininspired intelligence is hindered by three bottlenecks: uncertainty about the brain mechanism, inaccurate models and methods of brain-



inspired calculation and restraints of computing fabrics and capabilities. The bottlenecks could be overcome via the following six steps:

A. Conduct big data analysis on the human brain to grasp its operational laws.

B. Help brain-inspired intelligence learn the basic functions of the human brain by imitating its visual perception, auditory perception and language processing to ultimately make intelligent decisions similarly to the human brain.

Not long ago, four Chinese government departments including the Ministry of Science and Technology jointly issued the National Specialized Plan for Basic Research under the 13th Five-Year Plan (2016-2020), targeting long-term major strategic demands of national importance for basic research of key scientific and technological projects, one of which is brain science and research. VCG

C. Insert chips into braininspired intelligence and produce them in batches that can be widely applied in various sectors.

D. Erect a brain-inspired computing platform for large-scale concurrent computation.

E. Establish a brand-new computing system for human brain computer calculation based on quantum technology.

F. Develop brain-inspired intelligent robots with independent abilities. 47

智能轨道 **Autonomous Rail Edited by Li Zhuoxi**

lso known as virtual rail, autonomous rail helps trains enjoy smart operation on a virtual track through sensors.

June 2, 2017 witnessed the debut of an autonomous rail express transit system, the first of its kind in the world, independently developed by CRRC Zhuzhou Institute Co., Ltd. An integration of modern trams and buses, the system is considered cutting-edge public transportation and a viable solution for large and medium-sized cities.

Virtual rail tracking control technology developed by CRRC Zhuzhou Institute Co., Ltd. used in the autonomous rail express transit system precisely commands operations on the virtual track, with sensors detecting the posture and

coordinates of the train. Compared to traditional means of transportation, it enjoys advantages in flexibility, safety, energy saving, transport capacity and cost.

An autonomous rail can adjust its own transport capacity with changes of passenger flow: It operates three carriages when expecting 300 passengers and five when expecting 500, thus cutting waste significantly.

The biggest cost saving arrives on initial investment, because no tracks are needed for the unmanned vehicle, which drives on virtual rails. This is very attractive considering the price tag of magnetic suspension used in subways and light rails. Today, in China, it costs some 400 to 700 million



The train for the smart track express system is about 30 meters long and follows a virtual route guided by various sensors. It can even run without a pilot. IC

yuan to build a kilometer of metro, and 150 to 200 million yuan per kilometer of modern tram. For autonomous rails, however, for the same transport capacity, it would cost only a fifth of the cost of a tram by renovating existing roads.

Furthermore, the battery-

powered engine is more efficient and environmentally-friendly: A 10-minute recharge of a lithiumtitanate battery enables 25 kilometers of operation.

A demonstration route is expected to open for commercial operation in 2018. 47

Dali and Tiger Leaping Gorge: The Amazing Trip Continues

Text and photographs by Helena Villar Segura

t took us almost a day to reach the northwest of Yunnan Province from Yuanyang. With the terraced paddy fields still in our minds, we continued the trip. To get to our next stop, we needed several means of transportation. A shared car, a local bus and more than 11 hours on a train later, we were finally in Dali. I had traveled on an overnight train in China before. However, while I found it uncomfortable and tiring those first times, the more time I spend on the slow train, the more I enjoy the whole experience. It is a very rare contrast, peaceful and stressful at the same time: going through a chaotic line, feeling the excitement of people around you carrying tons of articles of all kinds, children running up and down the carriage, the unique smell of instant noodles that flies around the aisle, the sound of snoring, a hard bed and five roommates, jokes, laughs, and extraordinary conversation in an impossible foreign language for us. And, all the while, China passes by the windows-nonstop. Trains are amazing.

It was really early when we got to the main entrance of the city, from where we could see a long, busy street with two-story buildings. Small shops, cafeterias, youth hostels, historical sites, locals and visitors were starting their days. In the background, a stunning mountain embraced Dali. The thing I remember most vividly when I look back is the way the clouds fell down from the top of the mountain range. After trying in vain to capture the landscape with our cameras, we started looking for the hostel we had booked to spend the night in. The place was incredibly beautiful. It was made of wood and full of colorful ornaments and, as usually happens in small hostels in China, everyone was willing to help. Since



Enjoying sunset in a tiny town just a few kilometers from Dali. As the sun drops, all the clouds covering the mountains begin to dissipate. This mystical environment is the result.

we had just one day to go around the place, the girl on the reception recommended that we wander around, rent a motorbike and go to some of the adjoining villages. That is how we discovered why some people consider Dali Old Town and its surroundings to be the most vibrant place in the entire province. We had Yunnan food, sweets made of roses and coffee. We saw farmers coming to work and visiting the Three Pagodas and the Chongsheng Temple, as well as Xizhou. About 20 kilometers away from Dali, this tiny town has a totally different environment, which is less touristic and very authentic. Following the sunset, we shared some drinks back in Dali, saying goodbye to the city. The next day we left for the Tiger Leaping Gorge, arriving late in the afternoon at the gate of the scenic area. We spent one night there before the

hike. People had told us amazing things about that place; we were really looking forward to it.

If we had listened to the suggestions of the guesthouse owner before starting our hike, we would never have gone to the mountains. While we were having our breakfast next to a German family-two children and their parents-the guesthouse owner came to our table. "Is it good?" she asked about our food. Then we started a conversation. It's always that easy in this country, no need for formalities: you can approach anyone and talk about life. She told us that the next day, she was expecting her daughter back from university, thousands of kilometers away. To her, it was the most important moment of the year. "I have been thinking of tomorrow for weeks," she said, before going on to look at



the grey sky. "It's dangerous to climb out there today. Maybe you should wait until tomorrow." It was the rainy season, and for the last few days, the rain had not stopped. In those weather conditions, landslides are frequent and rock piles are commonly found across paths. If a strong storm catches you on the hiking trail, things can turn difficult. So we discussed whether we should go on and take the risk, or just skip the Tiger Leaping Gorge and continue our trip to Shangri-La. Our time was limited; we could only spend a couple of days there, and postponing the hike was the same as giving up on it. That kind of "now or never" situation is something that nobody likes. None of us wanted to make the decision, so we asked the Germans. They were crossing the gorge, children included. So we went too.



Carrying tons of flowers, a local woman walks up and down the main street of Dali, giving a colorful aspect to the old town. There, elderly people impress us the most. They are always smiling, and their eyes look younger than their faces or bodies. Talking to them is a great experience.

About an hour later it stopped raining-we couldn't believe our luck. Carrying some of our luggage and some provisions for the hike, we entered the mountainous area on a very cloudy day. There were colorful prayer flags hanging everywhere along the road. The trail was muddy, slippery and narrow in some parts, but it was possible to make it through. After a few kilometers, we arrived at Naxi Guest House, located in a small mountain town where villagers were working here and there, carrying vegetables and harvesting Sichuan peppers. It was the first time I had seen them growing on a tree. Back home, my father is a cook, and I have grown up hearing about them and trying food flavored with Sichuan pepper. Now I was there—so far, so close. I sent him a picture to let him know. "I love you. Enjoy," was his reply. And so I did.

Feeling the cheerfulness of the place, we sat and rested for a while and had some flavorful Chinese food. The next section of the hike was the hardest one, and we needed to reach the crest before sunset. Leaving the German family behind, we kept walking. The Tiger Leaping Gorge has a length of around 18 kilometers and a height of almost 3,800 meters. The water in the river below roared wildly, deafening and violent, but as we climbed the hills, the sound disappeared and everything became quiet. There were towering mountains on either side, the Jade Dragon Snow Mountain and the Haba Snow Mountain. Standing there, they made the place colossal, isolated from the outside world. We were frazzled, and had started counting the sharp bends—28 in total, said the map—that it would take us to get to the upper part of the hike, when the mist covering the summits dissipated for the first time. I remember pointing behind my friend, wide-eyed, speechless. The beauty of the landscape was immeasurable and impossible to compare or describe. Of all the pictures we attempted to take, there was not even one that showed the true magnificence of what we saw.

main means of transportation. Drivers will try hard to get

However, this particular one isn't up to giving us a drive that morning. He is just smoking in the middle of the bustling

passengers, always in a really funny and friendly way.

town, as if it were the only thing that matters.

We had thought that this was the highlight of the whole hike. We were wrong. I could define the experience of going through the canyon as exhausting, tough or difficult, but that would be unfair. Hiking the Tiger Leaping Gorge exceeds all expectations. Just before night fell, with pain in our feet and backs, dreaming of a tasty dinner, we arrived at the Halfway Guesthouse. And there, as a backdrop to a terrace full of travelers of all different nationalities, was the most amazing view of the whole trip. Grandiose, rugged and imposing, the summit emerged in front of us. It is so big that you would think it was possible to touch it, to jump across the gorge to get to it. A legend tells of a tiger leaping from the eastern bank of the river, clearing a huge rock in the middle to land on the west bank. Who knows? Maybe that tiger felt the same as I did.

20 Years On, Hong Kong Prospers under "One Country, Two Systems"

evelopment, an abiding pursuit, is crucial for Hong Kong's survival, and it holds the golden key to resolving various issues in Hong Kong," Chinese President Xi Jinping said when attending a gathering celebrating the 20th anniversary of

Hong Kong's return to the motherland and the inaugural ceremony of the fifth-term government of the Hong Kong Special Administrative Region (HKSAR) at the Hong Kong Convention and Exhibition Center on July 1, 2017.

Two decades ago, the world watched

on July 1, 1997 as the Union Jack was lowered over Hong Kong and the five-star red flag of China raised in its stead. British colonial rule came to an end and a new dawn broke over Hong Kong, as it was returned into the welcoming arms of the motherland.



July 1, 2017: Lam Cheng Yuet-ngor (left) is sworn in as the Chief Executive of the Hong Kong Special Administrative Region in front of Chinese President Xi Jinping, who oversees the swearing-in ceremony, at the Hong Kong Convention and Exhibition Center in Hong Kong. by Lan Hongguang/Xinhua

Since then, the HKSAR has been run under the guidelines of "one country, two systems," "Hong Kong people governing Hong Kong" and with a high degree of autonomy.

Today, as the world turns its attention to the metropolis 20 years on, what does it see? A Hong Kong more dynamic than ever before, and one thriving under "one country, two systems."

World Bank data show that Hong Kong's indicator of the rule of law, a core value of Hong Kong society, has jumped from behind 60th in the world in 1996 to 11th place in 2015, well ahead of some





June 30, 2017: Chinese President Xi Jinping (center, front), also general secretary of the Central Committee of the Communist Party of China (CPC) and chairman of the Central Military Commission, steps onto the stage and sings the song "Ode to the Motherland" in chorus with performers and the audience during a grand gala celebrating the 20th anniversary of Hong Kong's return to China at the Hong Kong Convention and Exhibition Center in Hong Kong. by Ma Zhancheng/Xinhua

major Western countries.

Hong Kong's economy has grown by an average of 3.2 percent each year since 1997, quite remarkable for an economy which was essentially already "developed" 20 years ago.

Among 63 economies, this year's edition of the International Institute for Management Development (IMD) World Competitiveness Yearbook ranked Hong Kong as the most competitive, followed by Switzerland, Singapore and the United States. It is the second year in a row that Hong Kong has occupied the top spot.

These accomplishments have come amid Asian and global financial crises and the SARS outbreak—choppy waters indeed, which Hong Kong has navigated only with the support of the central government.

The last 20 years have fully proven that "one country, two systems" is not only the best solution to the historical Hong Kong question, but also the best institutional arrangement for the long-term prosperity and stability of Hong Kong after its return to the motherland.

China is now embarking on an array of development initiatives that the HKSAR could contribute to and benefit from, such as the Belt and Road Initiative, the internationalization of the renminbi, and the building of the Guangdong-Hong Kong-Macao Greater Bay Area city cluster.

Hong Kong could dovetail itself with the country's major national development initiatives and needs to unleash its formidable potential.

Just as Lam Cheng Yuet-ngor remarked in a speech after being sworn in as the Chief Executive of the HKSAR, "As we capitalize on our strengths and harness the opportunities presented by our country's development, Hong Kong's future is indeed bright and promising."

Based on news reports of Xinhuanet.com

"One Country, Two Systems": An Experiment in State Governance Text by Tian Feilong



September 24, 1982: Deng Xiaoping meets with then British Prime Minister Margaret Thatcher, and expounds the Chinese government's stance on the Hong Kong issue. Xinhua





July 1, 2017 marks the 20th anniversary of Hong Kong's return to China. The "one country, two systems" policy in Hong Kong has reached its middle period. Across China, discussions, research and commemorative activities have been held. The international community, while recognizing the effective governance of China's central government and Hong Kong's achievements over the past two decades, is eagerly speculating on the concrete plans and policies the central government will introduce for Hong Kong in the years to come.

When discussing the governance of Hong Kong, as well as paying attention to whether Hong Kong can continue to exercise a high degree of autonomy, the international community places more focus on the dynamic assessment of the certainty and rationalization of China's state acts. For the past two decades, under the framework of the "one country, two systems" principle and the *Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China* (hereinafter "*Basic Law*"), China's central government has fully respected and supported Hong Kong's high degree of autonomy, safeguarded its prosperity and stability, and contributed to and maintained the overall authority and order of the *Basic Law* in accordance with the law, serving as a faithful and qualified institutional guardian.

For China, practice of the "one country, two systems" principle in Hong Kong is much more than a simple management experiment. Socialist China has retained a local capitalist system for a long time and has actively supported and managed this significantly different existence. China has responded to and generally met the demands of various stakeholders at national, local and international levels and maintained the inner balance and vitality of the "one country, two systems" principle and the Basic Law. All these achievements have been made through hard work. While governing Hong Kong for the past 20 years, China's central government has engaged in study and exchanges with the international community at deeper levels and gained an even more comprehensive governing and legislating capacity.



October 1, 1997: 3,000-plus people from all walks of life in Hong Kong participate in the first official National Day flag-raising ceremony after Hong Kong's return to the motherland. by Liu Yanwu/Xinhua

May 4, 2015: Children celebrate China's Youth Day at the Golden Bauhinia Square. Growing up with the "one country, two systems" principle, Hong Kong's youth has inherited the spirit of patriotism. IC

Hong Kong's Return and Governance Challenges

In 1842, the Qing Dynasty (1644-1911) was defeated by the United Kingdom in the First Opium War (1840-42). The Qing government was forced to sign the Treaty of Nanking with the UK, the first of many unfair treaties forced on China by foreign imperialist powers in modern times. The treaty granted the cession of Hong Kong Island to Britain, from which time Hong Kong was under British colonial rule. At the same time, the countdown to Hong Kong's return to the motherland began. For China, the suffering and misery inflicted by war was far more than just cession of territory. From then on, the country's humiliating history of more than a century overshadowed the loss of land.

From 1842 to 1997, Hong Kong faced a trial of strength between two historical times and two identities. The first was a historical view of British colonial rule. By facilitating strong international trade and governance of common law, Britain became a global power in modern times. Based on this system, a more favorable view of colonial history was established. The flipside saw Hong Kong's return to the motherland as a victory for China and its people against the brutal semi-colonial and semi-feudal environment that was thrust on China in modern times, and the restoration of Hong Kong's sovereignty after struggles of generations as a road to prosperity. After two World Wars, Britain suffered a decisive decline, and its colonial system collapsed. In 1984, China and Britain signed the Joint Declaration of the Government of the People's Republic of China and the Government of the United Kingdom of Great Britain and Northern Ireland on the Question of Hong Kong in Beijing, confirming that the Chinese government would resume and exercise sovereignty over Hong Kong from July 1, 1997. Then, Hong Kong entered a 13-year transitional period before its return to China. The factors enabling Hong Kong's successful return lie not only in the patriotism of Hong Kong compatriots and the vision of a community of shared future for people from both Hong Kong and the Chinese mainland, but also in China's strength and alluring prospects for more reform and opening-up to the outside world.



February 15, 2007: The flower market in Victoria Park attracts numerous visitors. Visiting flower markets is a major activity for Hong Kong locals during the Spring Festival, and the one in Victoria Park is the largest and busiest in town. by Zhou Lei/Xinhua





August 20, 2003: A family from Guangzhou City shows their exit-entry permits for traveling to and from Hong Kong and Macao. From this date, citizens of Guangzhou were allowed to travel to Hong Kong and Macao as individual tourists. by Zhou Wenjie/Xinhua

On July 1, 1997, Hong Kong returned to the motherland, exciting the entire nation. However, some Hong Kong people's feelings about British colonial rule and the values and lifestyles shaped by Britain's colonial rule were not easily overcome. It is clear that during the transitional period from 1984 to 1997, some Hong Kong people were unable to change their feelings about British colonial rule, which had been guiding the city for 100 years, and embrace Hong Kong's return to the motherland.

Thus, it is understandable that some Hong Kong residents didn't feel the same emotion as people on the Chinese mainland about the restoration of sovereignty. People within the "two systems" have different values and political cultures which can't be ignored, even within one country. Besides, due to the various latent forces and barrier mechanisms set by Britain during Hong Kong's return to China, the trial of political strength between China and Britain didn't end in 1997, but influenced the governance of Hong Kong long after its return.

As we commemorate the 20th anniversary of Hong Kong's return to China, while summarizing the Chinese central government's achievements in governing Hong Kong, we should also notice that the



November 1, 2003: Astronaut Yang Liwei (right) and renowned Hong Kong Kung Fu star Jackie Chan sing together at a welcome ceremony for a delegation from the Chinese mainland. by Wang Xiaochuan/Xinhua



August 6, 2000: A local resident visits a ship of the People's Liberation Army (PLA) Hong Kong Garrison on its "open day." The event has helped build understanding and trust between PLA soldiers and Hong Kong locals. Xinhua

Basic Law might also be facing a sort of "mid-life crisis." The governance of Hong Kong currently faces some challenges: The administrative functions and acts of the government of the Hong Kong Special Administrative Region (HKSAR), as defined in the Basic Law, have been restricted. Excessive localization of jurisdiction has hurt some national interests. Some opposition forces in Hong Kong have shown a tendency towards radicalization and violence, directly threatening the order and security of the Basic Law. Hong Kong's social contradictions and improper public policies on people's livelihoods have led to local dissatisfaction and disappointment.

Governing Hong Kong: Setting out with Ease

China's central government has responded dynamically, following up and



June 6, 2016: Retired Chinese basketball superstar Yao Ming (4th from left) poses for a picture with other guests participating in the activities of the Special Olympics Hong Kong 40th Anniversary in Hong Kong. IC

diagnosing the major problems and evolutionary trends in the governance of Hong Kong. It has provided responses in line with its constitutional role and shouldered its responsibility to guard the "one country, two systems" policy and the *Basic Law*.

Based on some policies and related statements issued by China's central government on Hong Kong and Macao in 2017, several predictions have been made about the Chinese central government's future plans for governing Hong Kong:

The "one country, two systems" policy will remain unchanged for a long time. In quite a few documents and on many formal occasions, China's central government has pointed out that the "one country, two systems" policy and the basic laws, the framework of governing Hong Kong and Macao, will maintain stable for the long term. No major institutional reforms will be carried out, and greater importance will be placed on policy refinement and adjustment as well as more complete law enforcement. These moves have shown the continuity and strategic willpower of the central government's policy towards Hong Kong and provided critical constitutional and policy foundations for the long-term stability and prosperity of Hong Kong and Macao.

The principle of "governing Hong Kong in accordance with the law" will be further consolidated. Policies and related statements issued by China's central government on governing Hong Kong in 2017 highlight the general trend of the rule of law in Hong Kong. Greater importance has been placed on the following aspects: First, China's *Constitution* and the *Basic Law* form a joint law basis for the governance of Hong Kong. In this context, the legal molding and integration effect of the Constitution on the Basic Law should be reaffirmed and highlighted. Second, the Basic Law's role in administrative guidance should be reaffirmed and the central government will support HKSAR's chief executive and its government to carry out administrative functions in accordance with the law. Third, within the Basic Law, separatism in Hong Kong violates the Constitution and causes great damage to society. The principle of "governing Hong Kong in accordance with the Constitution and the Basic Law" has become the common governance policy for China's central government to govern Hong Kong as well as for Hong Kong's self-governance. China's central government has made it clear that it will transform from the previous practice of "governing Hong Kong through consultation" to "governing Hong Kong in accordance with the law."







Coordinating the five development goals for Hong Kong will invigorate its social reconstruction. China's 2017 report on the work of the government emphasized the "five goals" for Hong Kong's governance and social development, including exercising law-based governance, growing the economy, improving people's wellbeing, advancing democracy and promoting social harmony. The five goals have combined various topics including the rule of law, political systems, economics and society together. In recent years, the governance of Hong Kong has slid into traps of social movements, political reform, and even separatism, resulting in huge losses in strength and an economic slowdown. Hong Kong urgently needs to overcome the "over-politicization" trap, actively promote economic development, blaze a new trail for development and make new contributions to the motherland. The authority of the rule of law and the rationality of order are the basis for Hong Kong's prosperity and stability. While economic development and people's wellbeing are the key points in Hong Kong's reconstruction, they serve as important factors for Hong Kong to rejuvenate and heal the divide.





Tourists at the Wong Tai Sin Temple, 2013. A Taoist temple established in 1921, the Wong Tai Sin Temple is one of the most famous tourist attractions in Hong Kong. by Wan Quan

Regional integration will become the new strategic direction leading Hong Kong's economic development. In recent years, China's central government has been considering and actively promoting its national strategy, with closer cooperation and integration between Guangdong Province, Hong Kong and Macao as a key breakthrough. The basic design of the strategy is to help Hong Kong overcome its geographical limitations and immerse into the national system to cure the isolationism advocated by Hong Kong separatists. Using economic development to solve political problems exhibits the core wisdom of the "Chinese model." Clearly, Hong Kong society contrasts with mainland society in many ways. The improvement of the economy and people's wellbeing and regional integration of the economy cannot



Night falls in the neighborhood of Lan Kwai Fong, Hong Kong Island. Lan Kwai Fong is one of Hong Kong's most popular nightlife hotspots and home to abundant restaurants and bars. The tourism industry has been an important part of Hong Kong's economy since it shifted to a service sector model in the late 1980s. by Wan Quan

completely replace Hong Kong's goals of democratization and self-adjustment. Thus, collaborative governance is even more necessary to realize better results.

Hong Kong and Macao's unique advantages, status and function in China's national strategies, especially in the Belt and Road Initiative, demand more attention. Dynamic mutual benefits should be used to ensure and safeguard the just foundation of the "one country, two systems" policy. The high degree of autonomy for both Hong Kong and Macao is neither an innate right, nor granted by the colonists. It is a political decision by China's top legislature in the overall interests of the country's modernization, as well as its reform and openingup. According to the complete logic chain of the "one country, two systems" principle, by maintaining the prosperity and stabil-

ity of Hong Kong and Macao, China's central government has the valid goal of safeguarding and supporting the country's future development. In this sense, Hong Kong should not only enjoy the high degree of autonomy and various rights granted by the Basic Law, but also shoulder the responsibility and promote the political ethics of safeguarding national sovereignty, security, and development interests. By actively participating in regional integration and construction of the Belt and Road, Hong Kong can become an example of the accurate and complete practice of the "one country, two systems" policy, and provide food for thought for the "re-education of citizens" in Hong Kong and Macao.

For the past two decades, under the framework of the "one country, two systems" principle, both China's central

government and Hong Kong society have remained dedicated to the prosperity and stability of Hong Kong, economic interaction between the Chinese mainland and Hong Kong, and progress on the rule of law, as well as Hong Kong's social transformation under the framework of the Basic Law. While many achievements have been made, challenges from various realms need to be addressed. At present, Hong Kong's governance has entered a new phase, which urgently requires both China's central government and Hong Kong to conduct objective retrospection, summarization and introspection on the past 20 years. Only this will facilitate a brighter future for Hong Kong. **47**

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The Hong Kong-Zhuhai-Macao Bridge under construction. The bridge, which is expected to open to traffic in late 2017, will enable travelers to drive from Hong Kong to Macao or Zhuhai City in Guangdong Province in just half an hour. by Chen Xianyao

Since the 18th National Congress of the Communist Party of China (CPC) in 2012, despite grave difficulties both at home and abroad, China has risen to the challenge and worked hard to press ahead, driving forward sustained, healthy economic and social development, under the leadership of the CPC Central Committee with Xi Jinping at its core.

During the past five years, China has achieved major progress in finishing building a moderately prosperous society in all respects, made important strides in deepening reform, and continued to exercise law-based governance. All of these achievements show that Chinese people have the courage, ingenuity, and ability to overcome any difficulty or hardship, and that there is even better development ahead for China.

China's Modern Community Near Chaohu Lake

Text by Zhou Xin Photographs by Zheng Liang (China.org.cn)

n the first floor of the service center of the Binhu Century Community near Chaohu Lake, one of the five biggest freshwater lakes in China, there is a long counter for social affairs, where a loudspeaker and electronic signs announce who's next. A stand in front of it displays information brochures about accessing public services of various kinds, all printed in different colors according to their

categories. The public services displayed in the guide brochures include employment for the disabled, access to public rental housing, services for the elderly and small loans. Residents can find policies related to specific services, the eligibility requirements for those services, the documents they need to apply, and the procedures to follow. The service center is located in the community, so that residents who want to access public

@ * 亚光锴

察測世纪社区服务中心欢迎您

services can just go downstairs and do so.

Established in late 2012, the Binhu Century Community in Hefei, capital city of Anhui Province, is a combination of three smaller communities. With an area of six square kilometers and 134,000 residents, this new community has set an example for the reform of China's community system with its innovative methods of governance and Party-building.

On the first floor of the service center of the Binhu Century Community, a loudspeaker and electronic signs announce who's next.



June 13, 2017: A group birthday celebration for seniors in the Binhu Century Community.

A Big Pilot Community

Before the 1980s, China's economy and society were dominated by a highly centralized administrative mode. Most elements of Chinese people's lives were controlled by public institutions and stateowned enterprises (SOEs). Later, SOEs no longer provided public services, and this governance mode became inappropriate for the development of China. After several adjustments and reforms, the "district government—sub-district office—community" administrative system was established. However, this system has also been blamed for low efficiency and insufficient public services.

Instead of the three-level system, the

Binhu Century Community is directly administrated by the district government, making the system more efficient. The community has set up a joint governance council, which acts as a bridge between stakeholders. A service center has also been established to provide public services.

Many residents are members of the "Binhu Helpers" volunteer group, formed by residents and Party members. They provide services for residents in the community. Meanwhile, the community also purchases public services from nongovernmental organizations and supports social organizations. In order to make services accessible to all residents, the community has introduced a grid management mode and set up Party members' groups for each building, which can offer targeted services for residents living in that building in a timely manner. All these measures and endeavors have modernized the governance of the community.

According to Shu Hongying, secretary of the community's CPC Committee, the system and mechanisms of the lakeside community are "designed totally in line with the requirements on the innovation of social governance proposed by the 18th CPC National Congress." As a result, the community has achieved positive interaction and coordination between the Party, the government, society and the self-governance of the residents.



Community residents play pingpong together in the service center.

Community residents read books in the service center's reading room.



Volunteers from the "Binhu Helpers" prepare birthday noodles for the celebration for seniors.



Community residents learn to play musical instruments with a volunteer teacher.





Community residents practice dancing in the service center.

Service Center for Convenience and Happiness

While the first floor offers public services, on the second floor, many other activities are taking place. Children are having fun in a playground, some residents are learning yoga in their practice room, and other residents, old and young, are playing table tennis together. Besides this, you can also find a dancing room, a music room, and a parent-infant center here. The services and training classes on the second floor are all provided by warmhearted volunteers.

Cai Qinglin, deputy schoolmaster of the Community University for the Aged, is one such warm-hearted Party member. Not born locally, he used to be the dean of a middle school. He moved to the Binhu Century Community when he retired. A private school once invited him to take a management post with a high salary, but he refused. When Shu Hongying invited him to establish the Community University for the Aged, he agreed without hesitation.

"Ms. Shu invited me to establish this university. If she had offered a salary, I would definitely have refused. However, I agreed when she said that this is a job without payment. After all, I have been a Party member for a long time." The Community University for the Aged was founded after the Spring Festival in 2014. At first, the university only had three majors and around 100 students. At present, it has 13 majors and over 600 students, most of whom are middle-aged or elderly residents.

"Actually, many senior people have moved here from other places. They are here to take care of their grandchildren. They didn't know each other previously. They have nothing to do after the kids go to school. The university serves as a platform for them to get to know each other, learn something, and get some new ideas," beams Cai.

Grids Provide Targeted Services

Today, neighbors in China's communities have become strangers. They often see each other, but rarely greet one another or talk, and therefore they actually don't know each other. Eighty percent of the residents in the Binhu Century Community are not locals. And yet they have created a close community through this new structure of governance.

"We visit and offer our help to those who move in or out, get married, lose a family member, give birth to a child, or get ill," says Hong Dequan, a retired teacher and a member of the Party group of the No. 2 Building of Fengdanyuan Residential Quarter, the building in which he lives. "We are volunteers. Though we are old and retired, we are willing to contribute to the community."

The Binhu Century Community is divided into nine grids, and a Party group has been established in each building. These groups can provide services for residents living in their building, according to their specific needs.

"The reason we set up grids is so that we can extend our services to each building," says Li Ruihe, deputy secretary of the community's CPC Committee. "There are so many buildings in the community, each of which contains as many as 132 households. In total, around 134,000 people live here. The community governance cannot cover all of them, so we have to place a service station in each building. How did we do this? The elderly Party members are willing to do this."

Two children in the building where Hong Dequan dwells lost their parents in a car accident, and are currently being taken care of by their grandmother, who is almost 60. The family is still troubled by lawsuits, and faces great difficulties. Hong said that they have regularly visited this family, talked with them and found out what they needed. The Party group of the building and the CPC Committee in the community always visit them and give them support in many aspects, including financially.

Hong's Party group also attaches great importance to the education of children. Nowadays, many students are the only child in their family. Growing up in this environment, they are prone to thinking less about others' needs and feelings. So the focus of children's education in their building is "thinking about others." The members of the Party group tell children true stories, both ancient and modern, and talk about things that happen in their daily lives, so as to enlighten them.

Many families in this community have kids, but the parents are always busy working. When the summer holidays come, one big problem is taking care of their kids, who don't have to go to school after the parents go to work. During this period, the members of the Party group take care of those kids. They tell the children stories, play games with them and teach them about firefighting. Many other activities on topics including environmental protection have also been held. The Party group has contributed a lot to these kids' education.

Hong taught Chinese in Hanglu Normal School before retiring. As this year's summer holiday begins, he and other members in the Party group are planning to teach the kids some Chinese classics. "We are willing to do these kinds of things. We are very happy, and don't feel tired at all," they declare. 47

Figure 10 the Pulse of the Al Era

o you get sore fingers after texting your friends for a long time? In China, iFlytek, an information technology company working on intelligent voice systems, might offer a solution—you just need to speak to your phone, and its iFlytek voice input app will convert your voice into text. In addition to identifying major dialects in China, the app can instantly translate Mandarin

Text by Hu Zhoumeng Photographs by Zheng Liang

Chinese into English, Japanese and Korean, reportedly with 97 percent accuracy. To date, it has become one of the most popular input methods in China, with 430 million users.

Looking beyond mobile devices like smartphones and tablets, intelligent voice input is also a godsend for office workers who are tied to computers, typing all day long. In an effort to enable them to input and edit text in documents with their voices, MiMouse Technology, a company founded in 2015, has produced a smart mouse using iFlytek's technology. Feng Haihong of MiMouse said that they had received orders of over 40 million yuan up to January of this year.

Voice technology is getting smarter day by day. It doesn't just recognize voices, but also understands and analyzes them, help-

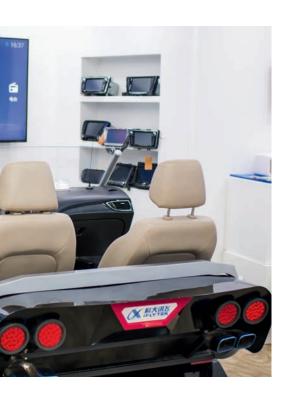


An iFlytek employee demonstrates a smart class system, through which targeted classes and homework can be delivered.

This smart automobile model, created by iFlytek, can be controlled by a human voice.

ing machines "talk" with people. As it is applied more widely in daily life, iFlytek has expanded its business into many sectors, including smart home appliances and smart cars. With a voice command, you can now ask your favorite show to play on TV, wind forwards or backwards wherever you like, or ask for directions when driving. You can even ask whether there are any good restaurants nearby. China's TV industry leaders including TCL, Skyworth, Haier and Konka have joined hands with iFlytek, and car makers Audi, BMW, Mercedes-Benz and Ford are also its partners. By the end of 2016, the number of vehicles pre-set with iFlytek's man-machine interaction technology had risen to one million.

Aside from making it easier to use various facilities, intelligent voice technology also tends to replace workers. Apple's Siri and Microsoft's Cortana may entertain users, but the intelligent interactive robot 'Xiaoman,' launched by iFlytek at the end





by iFlytek that can be operated by a human voice.

of last year, is taking real jobs. Nowadays, more than 20 of these robots are working at banks, helping clients with identification and service guidance.

When it was first built, iFlytek saw its mission as achieving smooth communication between man and machine. Introducing deep learning into voice studies in 2010, the company has made its own way in the field of artificial intelligence (AI), from voice identification and speech synthesis to man-machine interaction. For now, iFlytek's market value stands at close to 50 billion yuan, and its business stretches beyond China into America's Silicon Valley and Japan.

The growing business actually derived from a group of passionate young entrepreneurs 18 years ago. Back in 1999, China's voice technology market hadn't really taken off, as tech giants like IBM, Microsoft and Motorola still dominated. At that time, Liu

Qingfeng, founder of iFlytek, was a student at the University of Science and Technology of China in Anhui Province. Liu gathered a group of friends who were fascinated by technology, and started a business with a team of 18 members. They worked until three or four o'clock in the morning every day in a rented residential apartment, Liu recalled, and it was usually instant meals that filled their bellies. Sometimes, he even made do with cucumbers.

From a dedicated young entrepreneur to the board chairman of iFlytek, Liu has led his business into the spotlight on the world stage. In May 2016, the company claimed its 11th straight championship at the Blizzard Challenge, an international competition for corpus-based speech synthesizers. In the same year, it also won the first prize at the Winograd Schema Challenge, a renowned test of machine intelligence.



This software is able to record and dictate conversations, making it convenient for producing the minutes of meetings and interviews.



Cui Zijing, marketing director of MiMouse, shows how to use his voice to control the mouse. This mouse can follow some voice orders and dictate.



With a screen and an operating system, this smart piano facilitates learning by designing a combination of scores, letting renowned teachers deliver online lessons to users, or designing educational computer games.

So, what propels iFlytek forward in technology innovation? One key factor is its devotion to research and development (R&D). The company has set up a complete R&D system in its birthplace, Hefei City in Anhui Province, said Liu, and for the past five years, the company has poured one quarter of its sales revenue into R&D, five times more than the average level of internet companies.

The intelligent voice and AI industries are emerging in Anhui as an AI ecosystem, centered on iFlytek. Aiming at building an industrial chain, the industrial park China Speech Valley began construction three years ago, and is now home to over 70 enterprises. In 2016, 42 investment deals worth 1.5 billion yuan were signed there.

With a broad vision for AI's future, iFlytek has set up an intelligent interaction service platform for global developers to access its core technology. More than 300,000 business starters have enjoyed the service, and that number is increasing.

Vatman Zhou Donghong: Life of a Master Craftsman

Text by Zhou Xin Photographs by Zheng Liang (China.org.cn)

uring the summer of 1985, in a small, picturesque village in Anhui Province, Zhou Donghong, then 18, snuck back home after working for a week in a paper factory. He was sore from head to toe, and blisters covered his soaked hands. He wanted to quit. At the time, he could have never imagined returning to work there for more than three straight decades, but it eventually happened. He is now a famous craftsman with exquisite skill.

Calligraphy is an artistic treasure of Chinese culture, while Xuan paper (a traditional rice paper) shoulders the crucial task of carrying it. The manufacturing of Xuan paper is the jewel in the crown of China's paper technology. From raw materials to finished product, each roll of Xuan paper undergoes 108 steps, and the full process can take up to three years. Creating a great Xuan paper craftsman takes even more years of hard work.

Absent-minded Apprentice

Zhou Donghong was born in Dingjiaqiao Town of Jingxian County, where Xuan paper originated and continues to be produced. In July 1985, Zhou decided he was ready to make a living on his own. Thanks to a recommendation from his uncle, he ventured into a local Xuan paper factory.

His uncle had taken him to visit the workshops of the entire factory. When they

arrived at the workshop for vatmen, Zhou's eyes lit up. Vatmen stood on either side of a water tank filled with paper pulp. Each clutched one end of a bamboo screen and swung it back and forth to "vat" a piece of paper. The entire process takes less than 20 seconds. "The workshop was cool and the process very simple," Zhou recalls. "Each paper was made with two swings, so I thought I could do it."

A week later, he realized that the seemingly easy task was far from it. He spent over ten hours every day standing next to the water tank, and blisters formed on his hands after being soaked in water for so long. Without telling his boss, he snuck back home. He dared not tell his mother either, and instead told her the factory was on holiday.

A week later, Zhou's uncle found the missing child at home. When his mother heard the truth, she scolded him. Before learning paper vatting, Zhou had already worked for half a year as a carpenter. He considered it too exhausting and gave up. Zhou complained to his mother that "vatting paper is even harder than carpentry. You have to stand for over ten hours and get blisters all over your hands." His mother replied, "You won't do this or that, so what is it that you can do?"

Zhou reconsidered. "If someone else can do it, why can't I?" he thought. Eventually, he headed back to the paper factory.



Zhou Donghong, a vatman in the China Xuan Paper Group Corporation, has been committed to making Xuan paper for over 30 years. His excellent skill has won him the title of "Master Craftsman."



There are more than 100 steps involved in making Xuan paper. First, workers pick the best-quality materials. The raw materials of the paper are a mix of grass and wood in a certain proportion.



Then, a worker makes the material into a thin cake with the help of a big mallet. The materials are pounded 3,000 times. The beating sound is so loud that the worker has to wear a headset to protect his hearing.



The pounded materials are piled and cut into pieces.

No Man Is a Master the First Day

Later, Zhou transferred to the Jingxian Xuan Paper Factory, the predecessor of today's China Xuan Paper Group Corporation, to continue working. In this new environment, Zhou had a hard time finding a good mentor. Six months later, he had failed to master the essential skills of his job. He could vat paper, but the quality was not especially promising.

He and a colleague at the same level worked more than ten hours a day, but failed to complete their assigned tasks in the first two months. Paper-vatting pays by the volume of pieces produced, so he only received a nominal salary of around 20 yuan. After about eight or nine months, Zhou went home again and told his mother that paper-vatting did not earn enough money.

His mother retorted, "Why can others earn a living and not you?"

"It's not that I can't do it, but I can't get the hang of it."

"How can you do your job well without settling down to learn?"

After more of his mother's persuasion, Zhou returned again. This time, he got in touch with Mr. Shen, the best craftsman in the factory, and began learning from him. Shen was happy to teach him.

When paper is produced, unqualified products have to be beaten into paper pulp again, and the quality of rice paper made out of recycled pulp is even better. This time, Zhou made up his mind to learn the techniques well, and his talent as a vatman was gradually discovered.

It takes two people to vat paper, and one must lead. The person in charge is called Zhanglian, and the assistant is called Tailian. The rice paper quality depends primarily on the Zhanglian. Zhou was conscientious. When he vatted paper, he never hesitated to ask questions, and even asked his mentor for advice. After a period of time, the studious boy wanted to try his hand at serving as the Zhanglian. The factory had just recruited a number of apprentices, so he asked the masters to sleep in and let him wake up early to vat paper, with the apprentices serving as Tailian.

"The difficult part is being able to vat any type of Xuan paper, whether it's supposed to be thick or thin, large or small." Vatting paper evenly is not the only worry, because the weight must also be ensured. There are many varieties of rice paper, and the fixed weight of each type varies. Each piece has to weigh within a gram of a specified weight. Furthermore, the concentration of paper pulp is relatively high when it is first placed into the tank and gets diluted as more papers are vatted. How do vatmen guarantee that the thickness of paper is right when they vat with different concentrations of pulp? There is no way to accurately measure, leaving success entirely in the hands of the master.

"You can only feel with your hands, and it's about coordination between two people. Whatever job you do, being the best at it is never easy," Zhou says.

When paper is stacked after vatting, it is not supposed to have flaws like bubbles or holes. Zhou had to learn how to avoid such imperfections himself.

After three years of practice from dawn to dusk, Zhou gradually became experienced. His master encouraged him to work as Zhanglian. "He thought I was ready to do it, but I was still nervous. But if I never tried, I could never succeed." Soon thereafter, Zhou Donghong's apprenticeship ended.

How are masters rated? "One measurable is the rate of finished products and another is percentage of paper that meets the requirements, and both criteria must be met,"



After the pounded materials are cut into pieces, they are stuffed into a cloth bag and washed in a pool. Impurities, including sand, are washed away. Just the white paper pulp remains.



The paper pulp is mixed with a kind of gelatin and trodden by a worker. This process increases the viscosity of the paper pulp, making it easy to treat.



Then, the paper pulp is poured and mixed in a tank full of water. Two workers use a specially-made bamboo curtain to pick up the rough paper from the tank. Each time, the workers pick up one piece of paper. This is a crucial step of making Xuan paper.

Zhou explains. "Imperfect product is recycled into pulp again." A month after finishing his apprenticeship, Zhou reached the skill level needed to serve as a Zhanglian master.

Responsibilities of Great Craftsmen of the Nation

Since then, Zhou Donghong's skill has only increased, and he can now produce any variety of rice paper. In the 1990s, the factory began to produce many new products, and Zhou led the trials for a variety of innovative paper products.

Various awards followed; he was honored as a manufacturing expert and an advanced production worker, an "outstanding worker" of Xuancheng City and a model worker of the county and the province. In April 2015, he won the National May 1st Labor Medal. He was featured on CCTV in the same year and became a well-known craftsman across the nation. Many domestic calligraphers and painters now specifically ask for his rice paper.

Zhou first chose his career simply to make a living, but he eventually came to understand why ancient rice paper production methods are treasures passed down by our ancestors and remain part of the wealth of the Chinese nation. Passing on the ancient art is Zhou's greatest concern now.

In 1989, Zhou Donghong welcomed his first apprentice, who is now the senior technician of the factory. So far, he has trained more than 20 apprentices, but more left than stayed. "Vatting paper is hard work," he sighs. "It requires a high output and long working hours—around 14 to 15 hours a day. My best run was 35,000 pieces of rice paper in a month." After working the job for more than three decades straight, Zhou knows better than anyone how hard it is.

In winter, a bucket of hot water sits alongside the water tank. Because a substance in the paper pulp is affected by temperature, the vats have to use cold water even in winter. Vatmen dip their bare hands in the hot water from time to time to ease the pain. The workshop is perpetually humid and few can escape flare-ups of arthritis.

Zhou and his colleagues are aging, while fewer and fewer youngsters are interested in learning to vat paper. "You're already over 50—how long are you planning to continue vatting paper?" his wife teases him.

"I don't care how old I am," he retorts. "If I can do it, I will do it. I like my job." 47



When the wet paper is picked up from the tank, the sheets are first peeled off one by one and then stuck on a heated wall, which makes them dry fully. Each worker can dry up to 400 pieces of paper every day.



When the process is completed, the products are examined. Unqualified paper is recycled in the form of paper pulp.



1977: There were 195 exam sites across Beijing, available for all candidates who were eligible for the standards of the *gaokao*. All examinees had to strictly follow the rules of the examination, remaining solemn and quiet in the exam room. by Gao Mingyi



Text by Zhang Xue

In December 1977, China's passport to higher education reemerged after an absence of 11 years, at which time 5.7 million people ranging from teenagers to young adults took the exam across the nation. Coming from almost all corners of the country—schools, fields, army barracks and factories, they embraced the first chance of their lives to receive higher education through fair competition. Indeed, the life-changing exam turned the fate of many candidates that year, as it has in the decades since.

Turning Point

Chen Yongjun will never forget the date of October 21, 1977. Before leaving work to go home that day, then 22-year-old Chen got the news from China National Radio (CNR) that the *gaokao* the national entrance examination to colleges and universities would return. "It was a busy, noisy time in the factory when we heard the news," he recalls. "I couldn't hear the whole piece, but I caught the phrase 'resuming the *gaokao*."

The next day, Chen rushed to the reading room as soon as he arrived at the factory to look for the previous day's *People's Daily*, where he found the full text of the *gaokao* resumption notice.

He was one of many high-school graduates who devoted considerable time to various campaigns outside academic studies during the "cultural revolution" period (1966-1976). "I didn't expect to pass the exam because I hadn't learned much in school," admits Chen. "But the past didn't really matter because the exam could still change my fate." He decided to register, alongside a few other fellow workers.

With a month until the exam, Chen hunted for study materials and worked hard, late at night after work and during any daylight time he could find.

"During the decade-long 'cultural revolution,' none of us got a solid educational foundation," says Chen. "I am extremely grateful to my primary school teachers, who had helped me up in the first step towards the exam." As well as studying hard, he attributes his success to good habits like reading books and newspapers. "When I was a child, I found *Political Economy of the Soviet Union* on my father's bookshelf, and I liked it so much that I took it with me to work." The book might have played a role in Chen's choice taneously. He was part of the "non-traditional" group composed of mostly older students who had delayed college due to the chaotic "cultural revolution."

"There were two generations in my class," grins Chen. "The youngest was 16 and the oldest 32." Even with five years of experience in a railway power plant under his belt, he wasn't even close to being the oldest in the class.

The campus buzzed after so many years of silence. Joy filled the air as people read books and recited poetry. Early each morning, students could be seen on playgrounds and in front of dining halls reciting English words and expressions or reading textbooks aloud.

"We were lucky to have a number of professors who had studied at world-famous universities such as Harvard, Cambridge and Oxford. Their talents had been wasted during the 'cultural revolution' and they were excited to be back," recalls Chen. "Our class was so lively."

After receiving an undergraduate degree, Chen Yongjun continued studying for a Ph.D. and eventually became a professor of economics. Today, he is an internationally-renowned economics scholar and teaches at the Business School of Renmin University of China. His days are frequently packed: A few days ago, he returned home in Beijing at 5:00 a.m. from a Belt and Road seminar for local entrepreneurs in Shenzhen, Guangdong Province, but before taking a rest, he appeared at an academic salon at the School of Management of Renmin University of China at noon. After that, he rushed to a lecture for EMBA students at the university in the evening.

A month ago, Professor Chen returned to his old power plant to attend a reunion of former employees, most of whom have since retired. After seeing familiar faces again after such a long absence,

to study economics after graduation from college.

That year, 270,000 young men received admission letters from colleges and universities after fierce, fair competition.

In 1978, Chen bid farewell to his co-workers and headed to Anhui Institute of Finance and Economics in Bengbu, Anhui Province. In an unprecedented move, candidates passing the exam in 1977 and 1978 started the semester simul-



On the morning of August 4, 1977, Deng Xiaoping presided over a seminar on science, technology and education in the Great Hall of the People, where he made the decision to resume the *gaokao* system after an 11-year pause. Xinhua

everyone appeared emotional and waxed nostalgic about the good old days. "The gaokao helped me make a beautiful turn at the crossroad of my life," Chen admits. "For me, every step I took at various times was crucial. My five-year experience of working in the power plant gave me the chance to learn about the grass-roots class in China. It ensured that I stayed grounded during my academic research."



Brainstorming answers after the exam. by Li Miao

Invigilators explain the do's and don'ts. by Gao Mingyi

A Life Marked by the Era

"Such stories were like drops of water in the sea during that era," Chen Yongjun sighs, contemplating the relationship between his personal life and career. "Individual destinies are often determined by the backdrop of the times. Drops of water don't shine except at the top of the sea, riding the waves."

In 1976, China was plagued by a severe lack of professional personnel after the "cultural revolution." In May 1977, Deng Xiaoping, who hadn't yet officially resumed his post, noted that "the key to modernization is advancing science and technology, which requires education. Empty talk won't make it happen. We must seize knowledge; we must have talented personnel."

In July of the same year, Deng Xiaoping resumed his chair as China's head of education, science and technology. On August 4, he proposed a symposium and invited famous scientists and education experts from across China to formulate an action plan. Overwhelmingly, attendees complained inordinately about the system of admitting students to colleges and universities.

At that time, Chinese institutes of higher learning only admitted students who were recommended by the masses and approved by authorities. During the "cultural revolution," education in primary and middle schools became fractured, with quality varying widely. The recommendation system enabled widespread abuse, leaving countless outstanding minds without access to higher education and a polluted pool of college students.

At a seminar attended by heavyweights of education and scientists from around the country, Professor Zha Quanxing from Wuhan University cut straight to the reasons causing the chaos in higher



Spring of 1978: Peking University welcomes the first group of freshmen after China's resumption of the *gaokao*.



February 1978: A group of freshmen, who were enrolled in 1977, have a class at Tsinghua University. They were the first group of students to pass the entrance examination and be admitted by institutes of higher learning after the country resumed its *gaokao* system. Xinhua



Medical aid is available in case of emergency. by Gao Mingyi



Teachers wait outside the exam rooms to answer questions from their students. The subjects for the college entrance examination that year included Chinese, politics, mathematics, physics, and chemistry. by Gao Mingyi

education, and requested the resumption of the national admission system and fair examinations that would recruit the best talent.

After several rounds of discussions, on October 12, 1977, the State Council of China ratified the Ministry of Education's *Opinions on the Recruitment of Colleges and Universities* in 1977, which stipulated that workers, farmers and educated youths who worked in the countryside and mountainous areas, veterans and that year's high-school graduates were all eligible to take the entrance examination if they met basic educational requirements. Qualified candidates could voluntarily register for the unified exam.

That U-turn was mirrored in millions of lives. Many of those who passed the resumed college entrance exams in 1977 and 1978 are now leaders in sectors such as politics, commerce, academics, and culture. Standouts including Li Keqiang, China's premier of the State Council, who was admitted to the Department of Law at Peking University in 1978, Wang Yi, China's foreign minister and an alumnus of Beijing International Studies University, and prolific film director Zhang Yimou, who was admitted to the Department of Photography at Beijing Film Academy in 1978.

Those who passed the exam in 1977 and 1978 hardly had a choice in becoming trendsetters. After enduring turbulent lives, they returned to colleges with inflexible will and big long-term goals. Their work and life experiences gave them a far-reaching vision and the grit to endure hardships. Those people came of age as industries throughout the country were struck by a talent crisis, so the generation was saddled with a historic mission to drive China's rapid development after the implementation of reform and opening-up policies.



A scientific experiments class. In 1978, the University of Science and Technology of China established a special class for 21 gifted youngsters aged 11-15. Xinhua



March 29, 1981: Students at Peking University invited volleyball players from the Chinese men and women's teams, which had won honor for China, to a joint celebration on campus. On March 20, 1981, the Men's Volleyball Team representing China entered the Volleyball World Cup after beating South Korea 3:2 in the regional preliminary contest in Hong Kong. Xinhua

Gaokao: Future and Fote

Text by Zhang Xue Photographs by Feng Jin

June's arrival sends many young Chinese people and their parents into a tailspin as the decisive national college entrance examination, popularly known as *gaokao*, approaches. After many years of educational development, however, today's students are finding more avenues to higher education. Over the past 40 years since the resumption of the exam, China has seen a roaring growth in admission rate from less than 5 percent in 1977 to more than 75 percent today. Still, the *gaokao* remains "decisive" for many students' futures.



A Youthful, Brutal Arena

This year's *gaokao* drew 9.4 million test-takers. As always, most of their parents waited right outside the exam sites, with cell-phones ready to take photos as soon as the kids walked out.

A few other ways to get admitted to college have emerged, such as recommendations, enrollment prior to the exam or studying abroad. But for the majority of Chinese students, the *gaokao* remains their best shot at getting into a good school, and most work extremely hard in the hope of achieving their dreams.

Hengshui, about 300 kilometers from Beijing, is a little-known medium-sized city in Hebei Province. It first caught attention because of its position at the bottom of the province's cities in terms of GDP. Not so today. Over the last few years, Hengshui High School has become a *gaokao* powerhouse. In 2016, its students received the top four scores in the province and 139 graduates were accepted to Tsinghua and Peking universities—two of the most prestigious institutes of higher learning in China. That was more than half of all the students in the province to be admitted to the two universities that year. Not surprisingly, it is popularly referred to as a "*gaokao* factory."



And the term "factory" is warranted. Students' schedules are defined to the minute: Rise at 5:30 a.m., run with a book in hand. Then morning self-study, breakfast, and 13 classes with a lunch somewhere in between. After school they jog to the dining hall for dinner, and then continue studying until the lights go off at 10:10 p.m.

Zhi Chaoyang, 27, is a graduate of Hengshui High School. His days there remain fresh in his memory. "It was a rule that everyone had to go to bed when the lights went off in the dorm," he recalls. "A teacher patrolled every hour afterwards. If you even turned over, you could have a talk in the teacher's office."

Zhi admits that his high-school days were boring. "My teenage years were filled with nothing but classes, studying and endless tests. The Saturday tests and the score postings made everyone nervous all the time." Three years of painstaking efforts resulted in his admittance to Jinan University, and now Zhi is a senior analyst at Ernst & Young, one of the top four accounting firms in the world.

"My sterile high-school days made it hard for me to assimilate with the rest of the class during my early days at college," he recounts. "They laughed at me because I knew nothing about *Harry Potter* or *Star Wars*. For quite a while, I stayed pretty quiet. Even now, I would make the same choice again if presented with the opportunity. Despite a lot of problems with the *gaokao*, I believe it's a relatively fair battlefield. It was the only avenue for me to shake off poverty and become who I am. But I wouldn't wish it on my kids. I want them to have more options."

Studying Abroad

When everyone else was fidgeting anxiously as they waited for the *gaokao* results, Li Yao, a senior from Dongzhimen High School in Beijing, was as cool as a cucumber. Four months earlier, he had already received an offer to enroll in the Department of Anthropology at McGill University in Montreal, Canada. He didn't even have to attend school in the second semester and stayed home to research courses for McGill. However, Li escaped the fierce competition of the *gaokao* by starting the race much earlier.

June 7, 2017: On the first morning of the *gaokao*, parents are waiting right outside an exam site with their cellphones ready to take photos as soon as the kids walk out.



Mock test books for students to prepare for the *gaokao* can be found in almost every bookstore. Such books accompany senior high-school students every day.



As more Chinese high-school students seek to study overseas, foreign education institutions have launched exhibitions to attract Chinese students and their parents.



June 5, 2016: Nearly 1,000 high-school students from Maotanchang Town, Liu'an City, Anhui Province travel to downtown exam sites in 19 buses. Thousands of parents see them off outside the school.



A candidate in Beijing takes the last minutes for final review prior to an exam.



Li's final exam started the day he entered high school. "Anthropology was already my passion," he says. "It was my dream to study the subject at a university to establish a career." Because of his passion for a soft science at such an early age, someone suggested he study abroad, especially considering his impressive scores in English.

An English performance examination is required for admittance to schools abroad. During a summer camp at a foreign school, Li worked hard studying for the IELTS (International English Language Testing System) and ended up scoring far above the requirement for most foreign universities with 7.5 points, which was greatly inspiring.

During his final year of high school, Li prepared for the *gaokao* like his classmates and prepped on weekends for the SATs while studying materials required to apply to institutes of higher learning in North America.

"I eventually chose to study in Canada because of a trip there during primary school," Li recounts. "It was my first visit to Canada with my family, and I was deeply impressed." He chose McGill for its reputed teachers in the field, with hopes that they could broaden his vision and steer his future.

The comparatively affordable tuition was another consideration. "I'm so lucky that my parents could afford all the expenses." For many families in China, an annual rate of about 300,000 yuan is far too much.

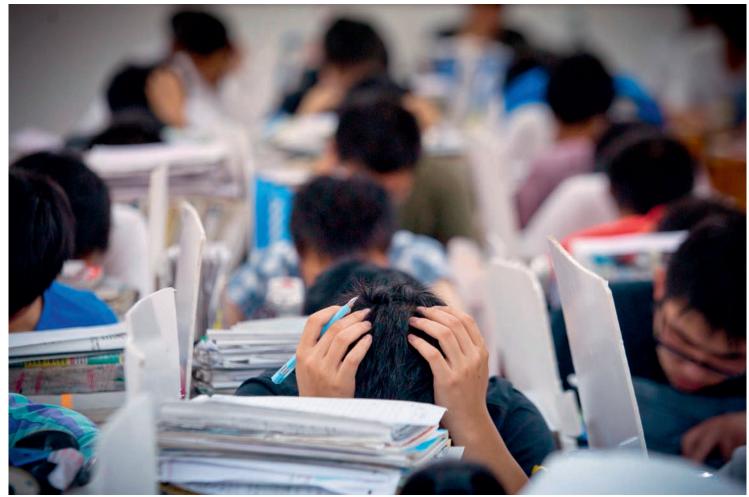
But Li Yao is not an outlier.

Recent statistics show that in 2017, 60,638 candidates registered for the *gaokao* in Beijing, 584 less than in 2016. Total registration has declined for 11 consecutive years.

Foreign universities have taken notice of the trend. So many Chinese parents are eyeing foreign schools that many have established offices in China. Streams of international exhibitions and education fairs have sold out in big cities as increasing numbers of younger students seek undergraduate opportunities overseas.

In some Chinese metropolises, high schools now offer international classes in collaboration with North American educational institutions that feature the exact system settings of high schools on the continent. Chinese colleges and universities are also launching such programs. Some parents simply send their kids directly to high school abroad.

The gaokao and the attractive market for studying abroad can peacefully coexist. Today, the once definitive gaokao has a new flavor in the new era. At an educational crossroads, the younger generation in China are enjoying greater options for their futures. 47



May 23, 2013: Students participate in a mock test at Maotanchang High School, dubbed a "gaokao factory," in Liu'an City, Anhui Province. With an increasing influence on social mobility, the gaokao provides an opportunity for the lower classes to move up in status and social class. In this context, some high schools adopt military-style management and make students study for a dozen hours each day. by Guo Chen/Xinhua

Ups and Downs of the Gaokao

hina's national college entrance examination, the gaokao can be the turning point in any student's life. A total of 40 years has passed since the gaokao resumed in 1977 after a decade-long interruption.

Due to the anniversary, the *gaokao* has been a particularly hot topic this summer. The media are vying for interviews with takers of the 1977 exam. Most have become successful as writers, scientists, officials or businessmen. The exam-takers unanimously agree that their lives were changed, and that without it, they would be growing crops in the countryside or working as migrant workers in cities.

As the first students admitted into colleges and universities after the resumption of the *gaokao* in 1977, the group was lucky to realize their dream of pursuing higher education. During the decade in which the *gaokao* was suspended from 1966 to 1976, pursuing academics over political orthodoxy could be a risky proposition.

On July 24, 1966, the Central Committee of the Communist Party of China (CPC) issued the *Notice on Reforming the Recruitment Methods of Higher Learning Institutions*, effectively ending the *gaokao* system that had been in place since 1952. According to the Notice, colleges and universities were required to abolish academic entrance exams and recruit students via recommendations and specific selection criteria. The Notice stressed that when recruiting students, higher learning institutions should prioritize a candidate's political performance over academics and health. This measure resulted in the replacement of the comparatively objective college entrance exam system with human opinion. Alongside the abolition of the *gaokao*, a cultural catastrophe dawned. Both traditional and Western cultures were swept away as "residue" of feudalism, capitalism and revisionism. The interruption of the *gaokao* also changed the lives of the youngsters of the time. Most were dispatched to the countryside to learn from "poor and lower-middle-class peasants."

In 1977, as news of the resumption of the *gaokao* broke via loudspeakers in villages, factories, mines and urban communities across China, Chinese youngsters who had been deprived of the dream of attending college saw a ray of hope cut through the clouds and illuminate a road to a brighter future. In the first few years after the resumption of the *gaokao*, college students were particularly thirsty for knowledge after a decade of cultural famine. They were also eager to change the fate of the nation that had endured a decade of economic stagnation and political turmoil.

Since the late 1970s, the *gaokao* has determined the future prospects of many individuals and their families. With an increasing influence on social mobility, the *gaokao* provides the opportunity for the lower classes to move up in status and social class. In this context, some high schools adopt military-style management and make students study for a dozen hours each day. Almost every city suspends construction projects on the eve of the *gaokao* to ensure that examinees sleep well, and some parents block roads near testing sites to prevent noise from passing vehicles from disturbing students during English listening portions of the exam.

In many parts of China, students tear their books into pieces after finishing the *gaokao*, a ritual with unknown origins. Excited students frantically shred their textbooks and supplementary teaching materials to vent the anguish they have suffered in preparation for the exam. For more than a decade of their youths, they study hard with an eye on this single exam. However, the ultimate goal isn't to certify knowledge, but to earn a chance to change their fate. Like a performance art, the book-tearing ritual implies that students see knowledge as nothing more than a stepping stone to the upper class, considered useless after the goal is achieved. Over the past four decades, many have reconsidered the *gaokao* system, and relevant educational departments have constantly reformed exam methods, such as a change from a nationally uniform exam to province-specific versions, a shift from national unified recruitment to school-based independent recruitment, and an alteration from seven subjects to 3+X subjects. In fact, the *gaokao* is not only important for every family with children, but also for the state at large. Every reform aims to provide more options and opportunities so that students need not compete so fiercely to be admitted to a college or university. Administrators hope to shift the country's education focus from exam prep to all-round development.

Today, the *gaokao* is no longer the only avenue for students to improve their chances of success, thanks to the introduction of alternatives. Children from rich families can study abroad in countries such as Australia, Britain and the United States without ever taking the *gaokao*. However, most students from ordinary families aren't as lucky: The *gaokao* remains their only available path to a brighter future. Meanwhile, the idea that "studying is useless" is becoming more accepted by some people in the lower classes. With this in mind, they prefer to capitalize on their earning power in their young age than waste so many years in school.

The initial intention of the *gaokao* was to provide everyone a fair opportunity to attend colleges and universities by studying hard, a principle which has been warped by reality. Motivations to seek education can never be completely divorced from desire for material gains, whether in China or Western countries, in the past or at present. An old Chinese saying goes "hidden in books are gold houses and beauties," which directly points to the material benefits of reading. Guided by distorted values, some parents stress over which famous kindergarten, primary school, high school and university their children will attend even before birth. Learning should be a joyful process of gaining understanding of the world and enhancing one's abilities. Once education is linked to material gains, studying becomes a torturous experience that deprives children of a happy childhood.

Over the past 40 years, the mainstream opinion of the *gaokao* has remained consistent: The exam can change destinies, transforming a physical laborer into a thinker, a high-school graduate into an intellectual and a grass-roots figure into a member of the elite. As the country celebrates the 40th anniversary of the resumption of the *gaokao*, many are hoping that the exam can inspire people from all walks of life to pursue knowledge, as well as respect humble laborers such as farmers and construction workers.

The author is executive editor-in-chief of China Pictorial.



n late February 2017, 35-year-old Wang Lin, a professor at Wuhan Union Hospital affiliated with Tongji Medical College at the Huazhong University of Science and Technology, was honored with an UNESCO award for women in science for her contributions to the usage of sericin, derived from silk, on tissue engineering and regenerative medicine.

The jury alternates between honoring those working in life and material sciences,

and selects professionals who have contributed significantly to scientific progress.

"In simple terms, our study shows the suitability of sericin, a major component of silk, in biomedical applications such as nervous and soft tissue and skin regeneration," explains Wang. "We also combined sericin with other biological materials and expanded its applications into more fields."

"Scientific research itself is an arduous path. People like me who have chosen this



May 3, 2017: Wang Lin introduces her team's research paper in *Small*, a peer-reviewed, interdisciplinary, international and authoritative journal. by Yu Jian/Xinhua

road should keep going," says Wang. "The road ahead is long. We must have strong willpower and resilience to march ahead." The Tissue Engineering and Regenerative Medicine International Society, dedicated to worldwide advancement of both the science and technology of tissue engineering and regenerative medicine, believes that Wang has conducted influential research in the silk medical application field.

Magical Sericin

Sericin, a protein created by silkworms during the production of silk as well as an important component of silk itself, has a long history in China. Archeological records indicate that silk was cultivated in China as early as the Yangshao period (5000–3000 B.C.). In the simplest terms, sericin is the gum coating the fibers that causes them to stick to each other.

Throughout history, sericin was usually discarded, unlike the highly soughtafter silk that was transported around the world. Today in China alone, an estimated 35,000 tons of sericin is discarded every year, a volume that poses a large threat to the environment, because sericin decomposition requires so much oxygen.

Although some scientists had explored the possibility of using sericin as a green material, its value in tissue engineering and potential application in regenerative medicine has only been discovered in recent years. Wang Lin and her team have been focusing on the usage of sericin in biomedical applications. Most recently, her team used sericin in restorative treatment like repairing damaged peripheral nerves.

Wang entered sericin research by chance. Several years ago, during discussions with her students, Wang realized that not much research on the medical application of sericin had been done anywhere in the world. "Fibroin, the other major protein component in silk, is widely used in medical applications," Wang reveals. "We think sericin may also be a treasure trove for medicine."

It was previously thought that sericin would be rejected by the immune system. By conducting new experiments, Wang and her team overturned this theory. They further discovered that sericin has a unique photoluminescent feature and a gel generation property as well as natural cell adhesion, all characteristics that make it an ideal biological material for tissue repair and regeneration.

After several years of systematic research, Wang and her team successfully extracted pure sericin with a well-preserved protein profile from cocoons. With minimally invasive injections, sericin can repair damaged nerves and is expected to solve several medical challenges. Wang and her team are still conducting experiments today, and research is expected to reach clinical trials within ten years.

"80 Percent of Research Is Setbacks"

"Scientific research is never easy," admits Wang. "I am by no means smarter than other people. The way I managed to achieve these things is quite simple: I just dive into my work and spend a lot of time on it." Wang's daily routine work involves performing experiments, reading research reports, writing essays and participating in group discussions. "Even today, I usually get home from the laboratory at 11:00 p.m. or midnight," says Wang. "On weekends, I usually go to a café with my laptop, where I read reports in a comparatively relaxing environment."

In Wang's opinion, scientific research requires hours of concentration and years of perseverance and hard work. Since Wang and her team began working in this rela-



Sericin is a protein created by silkworms during the production of silk, as well as an important component of silk itself. However, throughout history, sericin was usually discarded. IC

tively new field, they have endured numerous difficulties and failures. For example, when extracting sericin from silk, both its protein profile and biological activity must be well preserved. Thus, Wang and her team must carefully adjust temperatures, reagents and types of cocoons. Because extracting pure sericin involves many variables, a change in a single condition can lead to more than 100 re-tests. "Sometimes, we need to adjust our experimental program constantly," Wang sighs. "It is a process of trial, feedback, and progress. Honestly, more than 80 percent of my time is spent on setbacks and failures. But I seldom feel frustrated because every small step forward provides plenty of excitement."

"Work without innovation is useless, and research without practical application is just not as valuable," Wang declares. She constantly reminds herself that any research results must help patients. Today, she still spends a lot of time following the latest international scientific developments on many subjects including physics, chemistry, and materials science, hoping for inspiration for her own work. "Time spent in researching varies from years to decades, and scientists work not only to improve today's world, but also the future."

Return to China

Wang was born into a family of doctors in Hubei Province in 1982. When she was a teenager, she traveled to Germany to study while her father was working on a doctorate there. "My father returned to China after he completed his studies and was determined to serve our country, which influenced me a lot."

In 2005, after graduating from Wuhan University, Wang went to the United States to work on her doctorate. She served as a researcher at Harvard University and a visiting scholar at the University of Michigan. In 2011, Wang returned to China and founded the first Center of Regenerative Medicine in central China in Wuhan Union Hospital.

"The top foreign labs indeed offer higher pay and are better equipped than domestic ones," Wang admits. "But China now provides strong financial and policy support for scientific research personnel. The country tremendously respects and trusts scientists, especially young scientists. We have great confidence in the country."

"As China improved both the software and hardware for scientific research, I knew I had to return and make my own contribution to my homeland," she adds. 47

China's Antarctic Activities

Text by Yin Xing

Photographs courtesy of Chinese Arctic and Antarctic Office of the State Oceanic Administration of China



Remote and mysterious, Antarctica is the last terrestrial frontier on the planet. In 1958, the Scientific Committee on Antarctic Research was founded, involving 12 nations actively engaged in Antarctic research, and in 1959 they signed the *Antarctic Treaty*, to which China was admitted in 1983. And in 1985,

China became one of the consultative member countries of the treaty.

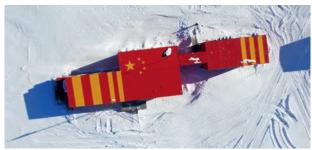
From May 23 to June 1, 2017, the 40th Antarctic Treaty Consultative Meeting was held in China, the first time the event had happened in the country. Just before the meeting, the State Oceanic Administration of China (SOAC) issued the report *China's Antarctic Activities*, reviewing the country's Antarctic exploration efforts over three decades and demonstrating its action plans and vision for the future.

"China has accomplished brilliant achievements in Antarctic activities over the last 30 years," says Xu Shijie, one author of the report with the SOAC. "People



Zhongshan Station, one of China's permanent stations in Antarctica.

around the world began to pay attention to China's activities there, resulting in some speculation. Some think we intend to plunder resources, some think we want to increase our military presence and some posit a special strategic purpose. We wanted to clarify China's stance, goals and vision, so we issued this report."



In 1985, the Changcheng (Great Wall) Station, China's first permanent station, was built on King George Island in west Antarctica. Since then, China has successively built Zhongshan Station, Kunlun Station and Taishan Campsite.

Antarctic Expeditions

According to the report, China's Antarctic expeditions commenced around 1980, the dawn of the "warming-up phase" (1980-2000), which preceded the booming phase (2001-2015). In 1985, the Changcheng (Great Wall) Station, China's first permanent station, was built on King George Island in west Antarctica. Since then, China has successively built Zhongshan Station, Kunlun Station and Taishan Campsite. China has mounted 33 Antarctic expeditions including multi-disciplinary scientific surveys in geosciences, life sciences and astronomy. Moreover, China has established a national Antarctic observation network combining air, shore, vessel, sea, ice and seabed-based infrastructure, which satisfies the basic demand of logistic support for Antarctic expeditions.



Two technicians adjust instruments. In the 1980s, China started its Antarctic studies.

"In the first two decades, China's activities in Antarctica focused on scientific studies," says Xu Shijie. "According to incomplete statistics, funding input from 2001 to 2016 totaled 310 million yuan, 18 times as much as the 1985-2000 period. Over the last decade, thanks to technological advancements, transportation developments and the increased incomes of Chinese people, more Chinese tourists have set foot on Antarctica and China has become more active on the continent."



China's first Antarctic expedition in 1984.

According to the report, China commenced Antarctic krill fishing in 2009, and its average annual harvest had reached 30,000 tons by the end of November 2016. And the International Association of Antarctic Tour Operators reported that the total volume of Chinese tourists to Antarctica was 4,096 in 2015 and 5,286 in 2016, placing China second only to the United States.

"China believes that the Antarctic Treaty System with the Antarctic Treaty as the core represents the legal cornerstone for the international community to address Antarctic affairs," declares Dr. Wu Leizhao, one author of the report from the SOAC. "China's activities in Antarctica comply with international laws. Since joining the Commission for the Conservation of Antarctic Marine Living Resources in 2006, China has explored and utilized krill resources on a sustainable basis, in stringent compliance with conservation measures required by the organization."

Considering the booming tourist influx, China requires domestic Antarctic tourism operators to follow international rules and operational modes to deliver acceptable performance in terms of Antarctic environmental protection and tourist safety. "Actually, the China National Tourism Administration has not approved domestic Antarctic travel programs yet," reveals Dr. Wu. "Chinese tourists, with the help of domestic travel agencies, join foreign cruises to reach the continent. Although Chinese tourists were the second biggest group, they were still less than half of that from the United States, which totaled 14,566 in 2016. But Chinese tourists are among the fastest-growing groups. We should pay attention to that."



Fleets of trucks head for Zhongshan Station, one of China's permanent stations in Antarctica.

Understand, Protect and Use

In 2014, when Chinese President Xi Jinping visited the Antarctic expedition project in Australia, he remarked that China would join hands with the rest of the international community to understand, protect and utilize Antarctica. This report also mentions China's commitment to elevate scientific research, strengthen environmental protection and safeguard the peaceful usage of Antarctica.

"First of all, we need to understand the land, before we can even talk about protecting and using it," says Xu. "We have very limited knowledge about Antarctica and have explored less than 20 percent of its area. But this landmass of 14 million square kilometers, as well as the ocean area of 35 million square kilometers around it, is closely tied to the fate of humankind. The land is the largest cold resource in the world, and better understanding it can help us address the problems of melting glaciers, rising sea levels and global climate change."

Not long ago, the 40th Antarctic Treaty Consultative Meeting was held in Beijing, approving China's Green Expedition Working Paper and Proposal jointly endorsed by Australia, Britain, Chile, France, Germany, India, South Korea, New Zealand, Norway, and the United States.





Xueying (Snow Eagle), China's first fixed-wing aircraft in Antarctica, was put into service in 2015.



The Xuelong (Snow Dragon) expedition vessel was put into service in 1994. China will deploy a new icebreaker in five years.

"In fact, all parties have always emphasized 'green expeditions,' such as leaving as few footprints as possible on Antarctica, setting up conservation infrastructure and using clean energy," insists Chen Danhong, director of the International Department of the SOAC, "but selectively and unsystematically. This time, we defined the concept, and systematized and expanded it by adding new innovative technological and management modes. Furthermore, we combined various environmentally-friendly methods together to expand the concept."

Chen elaborates that China's expedition team is using a new energy management system, an intelligent management platform based on multi-mode power supply and the Building Information Mode (BIM). This system makes full use of wind and solar energy and integrates the Geographical Information System (GIS), cloud computing, the internet of things, VR technology and facility management. The system allows better use of facilities and improves property management of China's Antarctic research stations, so as to prolong the lifespans of facilities and save energy.

"For us, Antarctica is a natural labora-

tory in which we can better explore the earth's evolution and mysteries of the universe, and seek new space for the global environment and resources," Xu says. "We prioritize protection over usage. China is committed to always using Antarctica in a peaceful, scientific and sustainable way."

Vision and Action

Released in 2016, the 13th Five-Year Plan for National Economic and Social Development of China (2016-2020) included a major program involving the Xuelong expeditions to Antarctica. According to the report, the 13th Five-Year Plan period represents a critical time for China to become a great maritime power. China will set up a new Antarctic station, deploy a new icebreaker and improve its Antarctic aviation capabilities.

"China's Xuelong vessel for expeditions is a comprehensive ship that facilitates scientific studies and transports supplies at the same time," explains Xu. "The Xuelong vessel was designed for transportation rather than for scientific research. Although we have renovated it many times, it still has 'inherent problems.' So we'll build a new



vessel specifically for scientific studies and fit it with professional equipment to give us better abilities to perform research."

Despite great development in recent years, China still ranks as a second-tier explorer of Antarctica, lagging behind countries like the United States, Russia and Australia, due to its late start. "For example, America's airplanes can fly to any corner of the continent thanks to several intercontinental runways," notes Dr. Wu.



In the first two decades, China's activities in Antarctica focused on scientific studies. According to incomplete statistics, funding input from 2001 to 2016 totaled 310 million yuan, 18 times as much as during the 1985-2000 period.

"More importantly, they have been gaining experience and gathering statistics through scientific observation and research for 30 years longer than us. We should learn from what they have done and are doing. Of course, we have some advantages. We persistently drill the ice core in the Antarctic inland Dome A region, which is home to the Kunlun Station. We have reached 800 meters deep. The results will contribute greatly to mankind's understanding of

Antarctica."

According to the report, China will further promote international cooperation and play a more active role in the global governance of Antarctica. In 1980, when China first sent two scientists to Antarctica, they traveled with an Australian expedition team. China has always believed that international exchange is an important facet of Antarctic exploration. "International communication is very heavy at the pole," says Xu. "We regularly cooperate with many countries including Chile, Russia, Uruguay, and the United States. Scientists from Thailand board our vessels to do research every year."

"Antarctica is a concern for all mankind, so as the report says, China deems Antarctica a great practice field for establishing a human community of shared future and will contribute Chinese ideas and wisdom to the peaceful use of Antarctica."

A River of Return

ot long ago, the National Bureau of Statistics of China released *Report on the Monitoring Survey of Migrant Workers 2016* (hereinafter referred to as Report), showing that in 2016, the total number of migrant workers in the country reached 281.71 million, a year-onyear increase of 1.5 percent. Noticeably, over 80 percent of the incremental amount worked locally, instead of in cities far from their hometowns. More and more migrant workers are finding jobs near their origins. How is this happening?

Growing Gravity

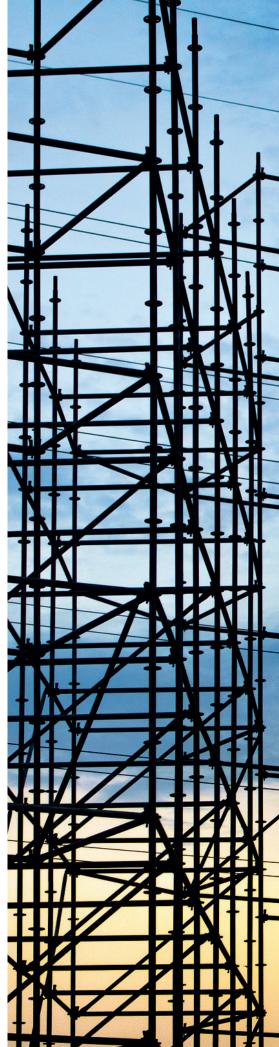
Guo Quan'an left his hometown in Renshou County, Sichuan Province almost 20 years ago at age 17 to join the massive population of migrant workers in Guangdong Province, where he became an expert in interior decoration. Recently, he has become eager to go back home to work.

He is realistic: In recent years, his hometown has seen great progress and created more business opportunities. He is confident he could land a job earning at least 4,000 yuan a month. He would save the cost of traveling back and forth, have more time with his family and be able to take care of his farmland. "It would be more economical," he suspects.

Guo is only one of many who want to "flow back" to where they are from. According to the Report, in 2016, the population of local migrant workers hit 112 million and is expected to grow higher. "More and more working migrants are choosing to return home to find jobs and start their own businesses," declares Professor Li Chang'an from the Faculty of Public Administration under the University of International Business and Economics. "It is an encouraging trend."

As China continues transforming and upgrading its industrial structure and adjusting the layout of regional industries, the central and western parts of the country have seen increasing capacity to employ migrant workers. Over the last few years, due to rising labor costs and relevant policies, labor forces have gradually shifted from eastern coastal areas to the central and western regions, where new growth points are found in and around the reservoir of labor forces. In 2016, for example, in Chongqing, once a major labor exporter, the number of migrant workers who chose to work locally was nearly 1 million more than the number working elsewhere, creating a heavy counter-current.

Working on scaffolds. The Report shows that between 2011 and 2016, the growth rate of migrant workers who worked elsewhere continued falling, with their share in all kinds of migrant workers dropping down to 60.1 percent from 62.8 percent. VCG





Furthermore, local economic development and various supportive policies have drawn more migrant workers back home for employment opportunities and to start businesses. "In recent years, the central government has issued many favorable policies for rural areas, covering taxation and finance, among others," reiterates Professor Li. "It has also accelerated local infrastructural construction and implemented the practice of relieving people in poverty-stricken areas by employing them instead of just handing over grant money. The government invests in infrastructural projects in which impoverished farmers contribute to construction to get paid, as well as launching projects concerning poverty alleviation, which have all created jobs for local farmers."

"Local governments have made numerous attempts at poverty relief by adjusting measures to local conditions," asserts Li Yongzhuang, director of the Research Center for Livelihood Economy under the Central University of Finance and Economics. "The growing population of local migrant workers evidences the strength of the local economy, representing increasing opportunities for entrepreneurial activities and employment, and helping more people out of basic agricultural labor."

It's also worth noting that the average age of migrant workers has been growing, along with the entire population's structural changes. The group is burdened with the pressure of looking after the older and younger generations at the same time: They are exhausted with working far away and reconsidering a return to their roots. Another factor is that in recent years, the wealth gap between inland and coastal areas has shrunk, as the average income of farmers has increased.

New Opportunities

The mass of 112 million people, more than the population of most countries, shifting locality is no small matter. What changes will the trend bring?

"This is a U-turn on the influx towards urban areas," illustrates Director Li. "Some of the group is flowing back naturally, which is providing a precious strategic opportunity for local economic progress."

"They can serve as a dual engine," Li adds. When they left home in the first place, they lived on their physical strength. Now they return with skills and experience in business management—dreams and ideas for start-ups. After upgrading technically, they will undoubtedly accelerate their hometowns' economic development by working for local enterprises or establishing businesses of their own. Some of them might participate in countryside governance. The economic progress of their hometowns will in turn convince more people to stay.

For quite a while, migrant workers have left much of their lives behind to earn a living elsewhere. As they return to work in their hometowns, problems related to left-behind children and empty-nest elderly people could be resolved automatically.



Xingtai City, Hebei Province: Liu Bingguang and his wife have opened a Taobao store in Xuewu Village to capitalize on the online shopping craze. IC

How to Keep Them?

It is a big challenge for local governments to keep the returning labor, because the increasing numbers will test the capacity of local infrastructure and public services.

"The local governments have a lot on their plates," notes Director Li Yongzhuang.

First, they can attract labor with business. Efforts should be made to lure major industries via a series of policies and measures to encourage employment as well as start-ups. They can support and accelerate rural e-commerce and logistics. Second, they can launch targeted campaigns for personnel management and training. Generally speaking, migrant workers have room to grow culturally and intellectually. Local governments should establish special institutions or entrust third-party institutions to intensify training of migrant workers of all ages to become employees in emerging industries and rare and scarce professions, and avoid being washed out of the employment market due to industrial and technological upgrading.

Third, they can establish infrastructure such as movie theaters and libraries to feed the demands of cultural life. The promotion of good habits and healthy lifestyles can help migrant workers continue to enjoy the advantages of big cities, even in their hometowns.

Fourth, they can provide systemic, perfected social insurance. The returning migrant workers have created a new type of local productivity, and any family considerations that could delay the return should be addressed. Along with five kinds of social insurance and a housing fund, local governments should work out more methods of providing aid and enacting preferential policies to tackle issues such as education, healthcare and senior care.



May 22, 2017: A couple, who once worked as migrant workers, take care of their sheep. They have returned to their hometown of Maoshan Village of Zhongtun Town, Guta District in Jinzhou City, Liaoning Province, to start a business raising 1,500 sheep. IC

April 20, 2017, Jiangxi Province: Returning migrant workers have found employment at a green lighting enterprise in Jing'an Industrial Park in Jing'an County. In recent years, the county has opened employment channels for migrant workers, helping them find jobs near their homes. Xinhua





The Forest Flyers

ou have no idea what a forest fire really looks like until you see one in person," declares Zhang Yinghai, command pilot and vice director of the aviation detachment of the forest fire services division of China's armed police forces. On May 17, 2017, he and his teammates battled with a huge fire in the Old Barag Banner near the city of Hulunbuir in Inner Mongolia Autonomous Region.

The fire had already burned 8,400 hectares of forest when Zhang's brigade arrived. Both the aviation detachment and the ground officers, a force of 12 aircraft and more than 9,000 people, joined the firefighting efforts. In less than four days, the fire was extinguished. However, the cost of the victory was tremendous hardship, sacrifices, and danger.

"Danger is always part of our work," says Zhang. "Recently, a fireman was rappelling from a helicopter when the rope got stuck, leaving him hanging from the helicopter. But our pilot was calm enough to carefully find a place to set him on the ground."

China's First Aerial Firefighting Force

Globally, aerial forest firefighting is nothing new. In the wake of World War II,

the United States refitted many of its seaplanes from the war to carry and drop fire retardant. Canada, home to vast expanses of forests, developed a special amphibian aircraft to fight forest fires in the 1960s. It could fill up with water and travel to the fire without missing a beat.

Compared to those Western countries, China's development of an aerial forest firefighting force started late. In July 2009, the aviation detachment was officially formed in Daqing, Heilongjiang Province in northeastern China, becoming the first forest aviation force in the country. After years of rapid development, the detachment now has 18 helicopters, three command pilots and six first-grade pilots. They provide transportation, forest protection, firefighting, patrol and search and rescue services.

Just mentioning the phrase "aviation detachment" brings aerial firefighting to many people's minds. Along with their direct fire control and prevention efforts, another major duty of the detachment is to take firefighters to areas near the fire. Air transportation of firefighters has gradually become common practice in China. "We save tons of time traveling by air, which enables us to get fires under control before they get too big," comments Zhang. "The people involved in the firefighting save tremendous energy, so we don't need as many."

Two forest fires broke out, one on May 19 and the other on May 21, 2016, in the Greater Hinggan Mountains in China. The detachment sent out three helicopters to transport firefighters and performed water drops with buckets to support the ground firefighting force.



May 19, 2017: Firefighters battle with a huge fire in the Old Barag Banner near the city of Hulunbuir, Inner Mongolia.

Firefighters are transported to areas near a fire by a helicopter from the detachment. Transporting firefighters by air has gradually become a common practice in China.





In September 2015, eight helicopters from the detachment participated in a drill organized by China's forest fire services, working together with ground forces.

Participal.

A helicopter joins the rescue efforts in a forest fire, 2017. At present, the detachment provides transportation, forest protection, firefighting, patrol and search and rescue services.

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CHINA



Checking the engine parameters of a helicopter. To ensure flight safety, the detachment carries out regular helicopter maintenance.

However, since weather in the mountains can be severe and change fast, turbulence is frequent and air-land operations are always filled with tension. Years ago, when then-vice director Lin Hongri was returning from a mission to transport firefighters for a land operation, he found the runway shrouded in clouds so thick that landing seemed impossible. He had already been in the helicopter for more than three hours and fuel was running out. Lin eventually found a small gap in the clouds to the southeast of the airport. With help from the weather radar, the experienced pilot quickly determined the precise location of the clearing. Lin flew the chopper at an altitude of just 200 to 300 meters around the mountainous areas southeast of the airport for more than 20 kilometers before landing safely.



Training in the Field

For the comparatively young aviation detachment, firefighting experience is gained both through drills and real operations.

In August 2011, the forest fire services organized a large-scale fire extinguishing field drill just as the detachment had begun formal training. When the detachment was asked about participation in the joint drill, some objected. "We had just begun training. We didn't want to lose face by screwing up during the drill."

However, Wang Xingkun, then air squadron commander of the detachment, was thinking differently. "We should not only join the drill, but even lead it," he declared. "If we are afraid of losing face in peacetime, we may lose our lives to the



fires. A forest fire will never wait for us to be fully prepared."

"In recent years, firefighting experience in the United States, Russia and Canada has evidenced that dropping water from helicopters is one of the most effective methods for fire suppression," commented Wang. The detachment decided to participate in the maneuver and used helicopters to drop water from special buckets attached with cables. Although such water drops are frequently performed in many developed countries, technical difficulties had prevented China from using them in the past.

A helicopter piloted by Wang lifted off with a massive bucket for the first time. After 30 minutes of flight, the plane's body began to shake suddenly. "What bad luck! I ran into severe turbulence," recalls Wang. As his speed dropped, the helicopter experienced even worse shaking. In such conditions, emergency safety protocols recommend Wang release the bucket to save the helicopter. However, the veteran pilot was not keen on destroying a piece of equipment worth more than US\$70,000 so fast. Gripping the controls tightly, Wang slowly reduced the amplitude of oscillation and pulled the helicopter up with all its power. Ten minutes later, the helicopter had regained stability and raced out of the turbulence. This experience provided Wang with first-hand information that he later passed on to other pilots trained to perform a helicopter water drop.

The team never stops learning. During drills, the detachment realized that if the flame front exceeds 10 meters in height, water dropped from a helicopter, if insufficient in amount, will break up into particles and oxygenate and feed the fire. After discussions, the detachment decided to do four drops right in a row. They performed experiments to determine the ideal density of following helicopters as well as air speed and the most effective maneuvers to drop the water. All these problems were solved one by one in three months. On the day when the field maneuver was carried out, Wang's aircraft lifted off first, followed by three other helicopters, each over an interval of 30 meters. Forest fire experts spoke highly of the formation after seeing its firefighting operation, and believed that it filled the gaps in China's forest aerial firefighting.

Their newly-developed techniques were soon put into practice. On September 18, 2015, a fire broke out in the forests of the Greater Hinggan Mountains in northeastern China. Due to many sudden changes in wind direction, the fire spread erratically and the situation remained serious for a long time. The detachment dispatched eight orange helicopters in two formations. The four choppers in the first formation performed water drops with buckets. The second formation, consisting of four helicopters with belly tanks, flew over the fire at a low altitude and dropped water from the air. The fire was contained quickly.

By now, the detachment has performed several hundred flights and accumulated data on more than 3,000 fires. They have also studied more than 30 difficult scenarios involving potential extreme conditions and developed more than 10 new aerial firefighting tactics.

"Fire can decimate old-growth forests in minutes," insists Zhang. "And forest fires pose a great threat to personal and property safety, not to mention the environmental protection and water and soil preservation efforts. We carry out dangerous missions throughout the year, but we are happiest when we see our lush forests thriving safely."

Teahouse Around the World

Photographs courtesy of the Beijing People's Art Theater unless otherwise credited

t 7:30 p.m. on June 12, 2017, the lights went up at Beijing Capital Theater, an exclusive stage with over 1,000 seats that is home to the Beijing People's Art Theater (BPAT). The venue was packed for the opening night of a revival of the classic *Teahouse*, one of the BPAT's signature pieces.

The show is part of a big celebration to commemorate the 65th anniversary of the BPAT, one of China's leading theater companies. *Teahouse* is considered one of the most profoundly significant plays in the company's history.

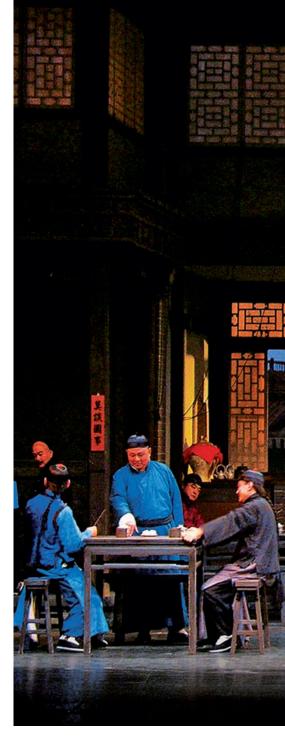
From China to the World

In 1956, Lao She (1899-1966, born Shu Qingchun), a modern Chinese literary figure and artist, published the realistic three-act play *Teahouse* to widespread acclaim. Since its debut at the BPAT in 1958, *Teahouse* has been performed 700 times by two generations of BPAT artists, and it still enjoys popularity throughout China and metropolises around the world.

"Teahouse is an ideal microcosm of the times," asserted Lao She. All three acts of the play are set in a teahouse called "Yu Tai" in old Beijing. Now having been performed for more than half a century, it follows 70 characters and showcases the rise and the fall of Yu Tai and the fates of the people in different historical stages including the late Qing Dynasty (1644-1911), the Northern Warlords period (1912-1927) and after the end of the Chinese People's War of Resistance Against Japanese Aggression in 1945. "Their vicissitudes in life mirror what society was really feeling," remarked Lao She.



June 12, 2017: The Beijing People's Art Theater (BPAT), a state-level theater in China, celebrates its 65th birthday with a revival of the classic *Teahouse*, one of its signature pieces. by Li Chunguang





A still from the 2011 version of *Teahouse*. Since its debut at the BPAT in 1958, *Teahouse* has been performed 700 times by two generations of BPAT artists, and it still enjoys popularity throughout China and in metropolises around the world.

Teahouse could only have been set in China considering the iconic teahouse, strongly Beijing-flavored dialect, concise yet deep-drawn language and sculpting of distinctive characters such as Wang Lifa, owner of the teahouse, honest and kind Master Chang and Qin Zhongyi, an entrepreneur who dreams of saving the country.

The two earliest productions, directed by BPAT co-founder Jiao Juyin (1905-1975) and Xia Chun (1918-2009) respectively, attempted to inject the play with even stronger Chinese cultural flavor.

"Jiao Juyin's production of *Teahouse* changed the aesthetic principles of Chinese drama," commented Lin Zhaohua, a famous Chinese director and art director of the revised version of *Teahouse*. "These principles can be seen everywhere from the rhythm to the handling of characters, narration of time and space and diverse performance styles."

In the year 1980, a production of *Teahouse* went abroad for the first time: In 50 days, they performed the play 25 times in 15 cities across France, Germany and Switzerland, inspiring lofty acclaim wherever they went. On September 30, 1980, a German newspaper called *Teahouse* a "miracle of the Eastern stage." Moreover, the play also triggered a strong reaction after performances in China's Hong Kong and Taiwan as well as countries such as Japan, Singapore, Canada and the United States.

A typical Chinese play in many ways, *Teahouse* profoundly comments on the human condition amidst extreme circumstances. As the German newspaper commented, performers opened a door with the stunning drama, showcasing a culture strange yet intimately familiar: People of every kind experience the same bitterness during war, chaos, violence and times of ignorance and self-deception. A great drama can be appreciated anywhere in the world.



Lao She (2nd right), the author, Jiao Juyin (right), director of the BPAT, and Xia Chun (3rd right), also a BPAT director, work on the plots of *Teahouse*. In 1956, Lao She (1899-1966, born Shu Qingchun), a modern Chinese literary figure and artist, published the realistic three-act play *Teahouse* to widespread acclaim. Xinhua



A still from the 1958 edition of *Teahouse*, which was hailed a "miracle of the Eastern stage" by a German newspaper.



September 12, 1983: Haruko Sugimura (center), a famous Japanese actress, congratulates the first-generation crew of *Teahouse* on a successful performance in Tokyo, Japan. Xinhua

2016: The second-generation crew of *Teahouse* holds a press conference in Mississauga, Toronto, Canada. Xinhua



A still from the 2002 version of *Teahouse*, directed by well-known director Lin Zhaohua and staged by young-generation performers, including Pu Cunxi, Liang Guanhua, and Yang Lixin. Performed more than 300 times, this version exactly copied the performance and stage design of the 1958 version.



A still from *The Visit*, 1982, when the BPAT staged the magnum opus of Friedrich Durrenmatt, a Swiss German-language playwright, for the first time. The drama was re-rehearsed in 2015.



A still from *Absolute Signal*, China's first small theater show, which premiered in November 1982. In the 1980s, the BPAT intentionally inherited old traditions while also blazing new trails by absorbing elements of Western modernism and post-modernism.

A still from the 2004 edition of *Thunderstorm*. During the 1950s and 1960s, the BPAT enjoyed a run of modern Chinese masterpieces such as *Thunderstorm* by Cao Yu, which localized imported drama, established a realistic theatrical style for the BPAT and bestowed Chinese drama with distinctive Chinese flavor, deeply rooted in traditional Chinese culture. by Li Chunguang



A still from *Death of a Salesman*, by American writer Arthur Miller, during its debut at the Capital Theater in 1983, which was re-rehearsed in 2012.



A still from the 2013 version of *Xiaojing Hutong*. In the 1980s, the BPAT staged a number of dramas, such as *Xiaojing Hutong* (dubbed a post-liberation *Teahouse*), further nationalizing Chinese dramas. by Li Chunguang

Furthermore, the globalization of *Teahouse* started a dialogue between Chinese and Western dramas. "The great success of *Teahouse* made us proud of Jiao Juyin and the style he established," asserted Lin Zhaohua. "We became more confident in establishing a theatrical system of our own, which made a strong impact on the world community."

Inheritance and Innovation

The BPAT has contributed much more than just the play *Teahouse*.

The year 2017 is a big one for Chinese drama. European-style drama was introduced to China via Japan. More than 110 years have passed since Li Shutong (1880-1942), father of the Chinese New Culture Movement and an outstanding Chinese artist, established a professional theater in 1906. The following year, the theater staged the famous French play, *La Dame aux Camélias*, in Japan. Starting in 1938, Chinese drama was greatly influenced by the theatrical system of the former Soviet Union.

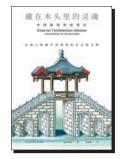
In 1952, the BPAT was founded by combining the Beijing People's Modern Drama Troupe and the drama troupe of the Central Drama Academy. During its early days, co-founder Jiao Juyin suggested Chinese drama establish its own style by fusing Chinese theatrical aesthetic principles with the tendencies of Soviet drama.

Jiao's proposal to establish a "Chinese style" heavily affected the progress of the BPAT. During the 1950s and 1960s, the BPAT enjoyed a run of modern Chinese masterpieces such as *Cai Wenji* by Guo Moruo, *Teahouse* by Lao She and *Thunderstorm* by Cao Yu, which localized imported drama, established a realistic theatrical style for the BPAT and bestowed Chinese drama with distinctive Chinese flavor, deeply rooted in traditional Chinese culture.

Generations of members of the BPAT have inherited and promoted the unique Chinese school of drama, inspiring practitioners across the country. In the 1980s, the BPAT blazed new trails by absorbing elements of Western modernism and post-modernism while performing several traditional plays such as Xiaojing Hutong (dubbed a post-liberation Teahouse) in 1985, The First Restaurant Under Heaven in 1988, which has so far performed more than 500 shows, and Absolute Signal, China's first small theater show, which premiered in November 1982, directed by eminent director Lin Zhaohua. "It opened a new space for the art of Chinese drama by blending elements of the East and the West," commented Tong Daoming, a distinguished Chinese theater critic.

"Today, the BPAT is working on two contrasting fronts: It is preserving tradition while seeking innovation," explains Ren Ming, president of the BPAT. "We can start with Eastern drama featuring profound Eastern cultural tradition and nourish it with modern styles. We will also naturally enhance the new Beijing flavor by focusing on presenting the Chinese capital accurately, as well as its diverse population of residents."

China's next generation of young artists should accept the *Teahouse* baton now that most of the people performing it are in their sixties. At the same time, they should seek new angles on the material, like versions such as Jiao Juyin's production have done. Artistic preservation requires the innovation to adapt classical content to fit contemporary times.



Wooden Soul: Color Drawings of Chinese Architecture (Essai sur l'architecture chinoise)

Anonymous, translated by Fan Dongyang, Beijing Times Chinese Press, June 2017

Prior to the emergence of photography, priests, missionaries and scholars from Western countries transmitted information about the Eastern world by drawing what they saw. The color drawings collected in this book were completed in the 18th Century by French missionaries and Chinese painters and lack historical records.

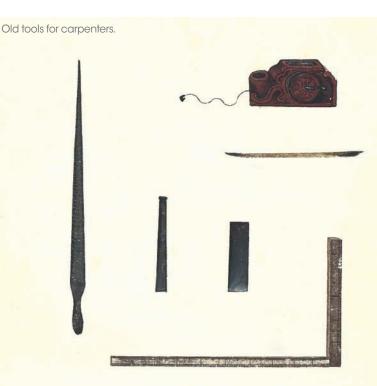
The 188 drawings selected for the book showcase almost every segment of traditional Chinese architecture including tools, materials such as bricks and tiles, walls, screens, pavilions, bridges, towers and a wide variety of structures with both highly detailed and macro-perspective work.

The editors illustrate connotations of traditional Chinese architecture with text from various perspectives: The screens represent the official system in ancient China; The pavilions and towers represent the unique Chinese landscape; The indoor details depict social positions and the sense of propriety in social activities in ancient China; And the relationship between towers and limits on building height evidences beliefs and ideals of ancient Chinese royal families and officials. Artists attempted to describe a morphological China, said translator Fan Dongyang.

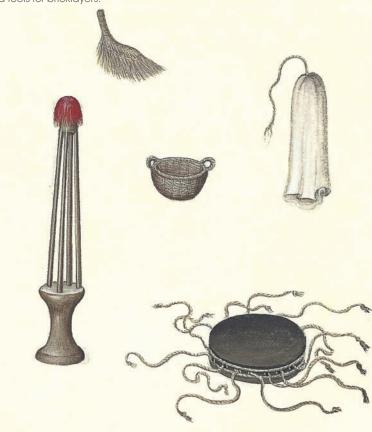
The drawings appear in both Chinese axonometric and Western scenographic methods, leaving an assumption that they were compiled by both Chinese and French artists. Also worth mentioning is that they depict a combination of reality and imagination: The "pavilion," for instance, is a real structure but was depicted in an abstract manner, while some of the "altitude buildings" were inspired completely by imagination.

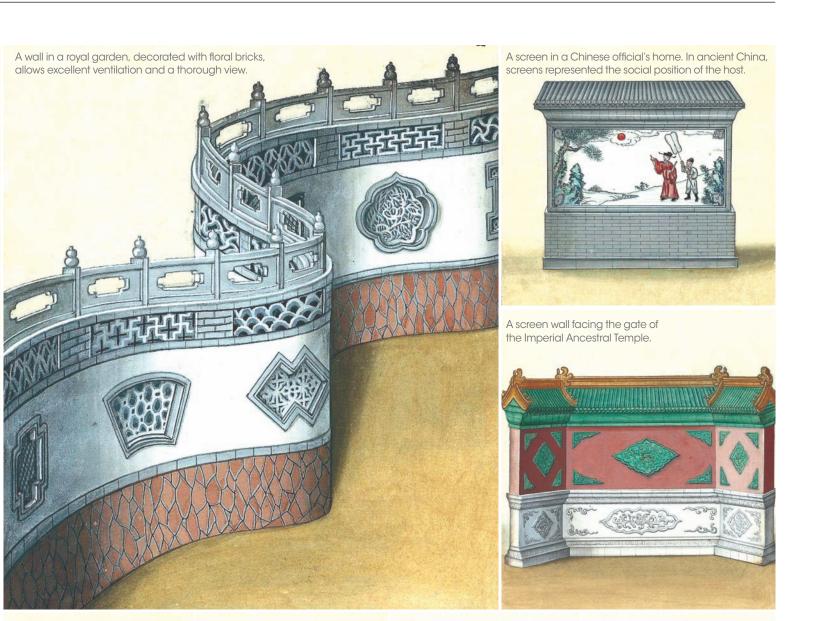
In the preface, Fan Dongyang admits that the information surrounding these works is incomplete and even wrong. For example, there is little about the technique used to make wooden structures in traditional Chinese architecture, and the imagined "altitude structures" may be entirely wrong based on available evidence. Nevertheless, the drawings represent the entire process of "material collection, categorization, analysis, assumption and seeking evidence, establishing cause and effect and asking and answering questions" on the subject of Chinese architecture in a spirit of "science" advocated by Europe in the Age of Enlightenment during the 18th Century. It is therefore of great value from this perspective.

The translator of the book, Fan Dongyang, is a young Chinese scholar specializing in Chinese architecture and urban and rural planning. He received a master's degree from Sciences Po in Paris and a Ph.D. in urban and rural planning from China's Tsinghua University.



Old tools for bricklayers.







Books





Rembrandt in Beijing

Text by Yi Mei and Wen Zhihong Photographs courtesy of the Leiden Collection

ver four hundred years ago, when Dutch painter Rembrandt van Rijn cut his *The Conspiracy of Claudius Civilis* into pieces in the hope of selling them to private buyers, it might have been hard for him to imagine that his works would now be drawing flocks of spectators to a museum in China—the origin of porcelain works once held personally by Rembrandt.

The National Museum of China is currently showing Rembrandt and His Times: Masterpieces from the Leiden Collection, which features eleven of Rembrandt's paintings, the largest single collection of his works held in private hands. The exhibition is jointly sponsored by the Leiden Collection and the museum, with support from the Embassy of the Kingdom of the Netherlands in China. Masterpieces in the Leiden Collection were mostly produced in the Dutch Golden Age by great painters such as Rembrandt van Rijn, Johannes Vermeer and Jan Lievens, as well as renowned Rembrandt School artists like Carel Fabritius. The exhibition celebrates the fijnschilders (fine manner painters) including Rembrandt's first pupil Gerrit Dou, as well as his accomplished students Frans van Mieris and Godefridus Schalcken, among other great masters.

"This exhibition explores the Netherlands' extraordinary production of art in the 17th Century with works of its most important artists," explains Dr. Lara Teager-Crasselt, curator of the exhibition. "At its heart is the greatest innovator of the period: Rembrandt van Rijn."

Teager-Crasselt defines the first phase of Rembrandt's career as the era in which he lived in his native Leiden. "The 1620s was the beginning of his artistic career, a period in which we see him experimenting, developing and having dialogues with other artists," she says. "Early in the 1630s, Rembrandt moved to Amsterdam, the most important city in the Dutch Republic, and he became a portrait painter before turning to historical subjects. We don't even know the identity of most of his subjects. But his work carries a remarkable sense of who these people are. Rembrandt was able to preserve the life and soul of these subjects. In the late 1630s and early 1640s, Rembrandt reached the height of his success. The 1650s and 1660s are considered the later period of Rembrandt's career. In 1656, he filed for bankruptcy. The end of his life was far from comfortable, but some insist that he produced his greatest work in times of struggle."

Dr. Teager-Crasselt reminds patrons not to forget that the singular relationship between the Netherlands and China in the 17th Century creates the backdrop for the exhibition. "China occupied a prominent place in the lives and imagination of 17th-Century Dutch artists, scholars and ordinary citizens alike," she adds.

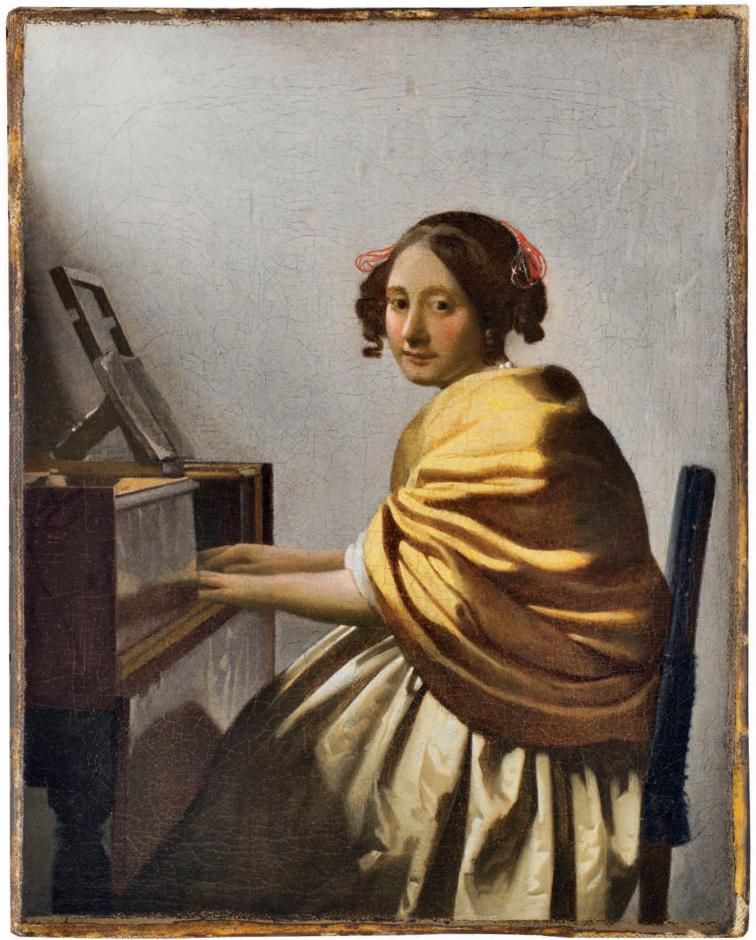
According to the curator, the Dutch

expressed more interest in Chinese culture, philosophy and history than people from any other European country in this period, as evidenced by a series of remarkable 'firsts:' Johannes Blaeu (1596-1673) published the first detailed map of China in 1655, Dutch poet and playwright Joost van den Vondel (1587-1679) wrote the first European play set entirely in China in 1667, and in 1675 the first European translation of the work by the Chinese philosopher, Confucius, appeared in the Netherlands. "These 'firsts' were facilitated by the vast global trading network established in the early 17th Century and the Netherlands' central role in it. During the period, Chinese art and culture, most notably Chinese porcelain, penetrated many Dutch homes. By 1638, over three million pieces of Chinese porcelain had arrived in the Netherlands."

The exhibition is comprised of more than 70 pieces in total, including portraits, historical paintings and genre scenes, which bring the historic nature of Holland's Golden Age of creativity to life. The 11 works by Rembrandt himself—the largest concentration of his paintings not belonging to a national museum—range from iconic masterpieces such as *Minerva in Her Study* and the much-storied *Young Girl with a Gold-Trimmed Cloak* to the sensational, recently-discovered *Unconscious Patient (Allegory of Smell)*, the earliest-known signed work of the master.



Minerva in Her Study by Rembrandt van Rijn (1606-1669), oil on canvas, 138 x 116.5 cm, 1635.



Young Woman Seated at a Virginal by Johannes Vermeer (1632-1675), oil on canvas, 25.5 x 20.1 cm, ca. 1670-1672.



Portrait of Samuel Ampzing by Frans Hals (1582/83-1666), oil on copper, 16.4 x 12.4 cm, 1630.



Portrait of a Lady, Seated with a Music Book on Her Lap by Gerrit Dou (1613-1675), oil on panel, 27.2 x 20 cm, ca. 1640-1644.



Scholar Sharpening His Quill by Gerrit Dou (1613-1675), oil on panel & oval, 26.3 x 21.2 cm, ca. 1630-1632.



Card Players by Jan Lievens (1607-1674), oil on canvas, 97.5 x 105.4 cm, ca. 1625.

Portrait of Rembrandt in Oriental Dress by Isaac de Jouderville (ca. 1612-1648), oil on panel, 70.8 x 50.5 cm, ca. 1631.

Portrait of Antonie Coopal by Rembrandt van Rijn and Workshop, oil on Brazilian chestnut (sucupira), 83.5 x 67.6 cm, 1635.





The exhibition also features an extraordinary work by Vermeer titled Young Woman Seated at a Virginal, which was painted on the same bolt of canvas as The Lacemaker (held by the Louvre) and is the only work from the master's mature period to be held outside of a museum. Other highlights include four of the finest paintings by Rembrandt's studio-mate in Leiden and friendly rival, Jan Lievens, Hagar and the Angel, one of only thirteen privately-held paintings by Rembrandt protégé and the creator of The Goldfinch, Carel Fabritius, nine significant paintings by Rembrandt's first and most influential pupil, Gerrit Dou, six significant paintings by Jan Steen and additional masterpieces including a dazzling portrait on copper by Frans Hals.

Recently, Dr. Thomas S. Kaplan, founder of the Leiden Collection (USA), granted an exclusive interview to *China Pictorial*.

What attracted you to Rembrandt's works as a child? What did you see in his work?

Dr. Kaplan: I fell in love with Rembrandt the first time I saw his paintings at age six, and appreciation for his art has remained with me throughout my life. Obviously, I did not look at Rembrandt through the complexity that I do now. On an aesthetic, visual level, it was perhaps the rich light, illumination and contrast between light and dark. But I do not think that it was all light and dark. I was already developing a genuine passion for history at that age, and it continued throughout my education. I believe that it is possible that the humanity of his work spoke to me even at that age. It is not an unreasonable theory considering the power of his work to connect people spiritually. Even a child could make that kind of connection. So, I think it was the beauty and richness of it

and the fact that I felt the heart of the artist. It was the hand, the eye and the heart.

It has been reported that you and your wife love narrative historical art. In 1642, Rembrandt's The Night Watch received criticism from the buyers because of its strong narrative. It also marked a major turning point in Rembrandt's life. What do you think of the narration in this painting and what it meant to Rembrandt?

Dr. Kaplan: Rembrandt faced criticism for several reasons. He was criticized because he saw things differently, and it became an ongoing theme. He was criticized for The Night Watch and by people who commissioned portraits because he painted his subjects the way they really were, instead of in an idealized way that the clients wanted. A very famous and dramatic example of that is what happened with his late work titled The Conspiracy of Claudius Civilus, which was commissioned by Amsterdam for its new city hall. At five-by-five meters, the painting was enormous and at least two hundred years ahead of its time in terms of genius, but it was rejected and returned to Rembrandt, who cut it into pieces to sell to private buyers. This was one of the greatest art crimes of that period. He was so far ahead of artistic trends of the time that no one could see it. Rembrandt is one of those famous names that everybody knows now precisely because of the things he did that upset his contemporaries. He never intended to upset people; he just saw things differently.

Some critics opine that the contrast between light and darkness in his work is magical and creates a sense of drama. Do you think that is the most outstanding characteristic of Rembrandt's work? **Dr. Kaplan:** I do believe the characterization of him as a master of light and shadow to be very true. He was an innovator; he was always experimenting with light and I think he understood that in the end: Light is the single most important factor in being able to create a sense of drama and life. He saw it, he felt it, and he expressed it. I think that emphasizing it is a very reasonable observation.

Could you tell us about the first time you purchased a Rembrandt? How did you feel about the work?

Dr. Kaplan: The first Rembrandt object that we acquired was actually not a painting—it was a drawing of a lion. This lion drawing was particularly powerful to me because I am almost as passionate about wildlife conservation as I am about Rembrandt, and I love big cats. So this was very meaningful to me. Even though we only have a few drawings and two from Rembrandt, that piece has always been very special to me.

In your opinion, how did Rembrandt's life experience influence his work?

Dr. Kaplan: If you study his biography, you will see the ups and downs in his life often reflected in his work. But my passion for the artist is not about his personal struggle. It is about his accomplishments. Everyone has a life story. Everyone has ups and downs in their lives and Rembrandt is not a tragic character because of his bad fortune-such struggles are usual in life and in humanity. His accomplishment was in being able to see things that others did not see. He saw beauty in disturbing things, he saw beauty in beautiful things, and he changed the history of art. I believe that this accomplishment would have happened independent of his life experience. I think it's who he was.

C On Display



Messiah – Fusion Dream of < J > < Z-772 > < 5 >, by Gao Lei, 2017, aluminum basin, turbo water gun, syringe, bronze, wooden umbrella handle, stainless steel, hemp rope, disposable carpet, wooden staircase, rolling gate, hanger and belt, dimensions variable.



A still from *Sketch I, Composition I, II, III & IV,* by Liu Yefu, multi-channel HD video, color, sound, dimensions variable, 21'38''.



Accidental Menagerie, by Max Hooper Schneider, 2015, mixed media, acrylic trays, polymer resin, aluminum structure, custom hardware, 304.8x274.3x38.1 cm.

The New Normal: China, Art and 2017

As part of the large group exhibition to celebrate the 10th anniversary of the founding of the UCCA, this show features works by 23 contemporary foreign and Chinese artists who focus on China in the context of globalization, probing how to cope with the fragile, turbulent and unpredictable world situation.

The exhibition was designed to provide an independent space for each artist to create a distinctive yet echoing motif.

Accompanying the exhibition is a series of seminars, dialogues, concerts, and dance performances, all themed around art, science and technology, politics and economics, literature and daily life, to help the audience better grasp the themes of the exhibition and become part of the campaign.

March 19 – July 9, 2017 Ullens Center for Contemporary Art, Beijing

Body Media II

This sequel to a 2007 exhibition features 29 works by 24 artists from 12 countries. Themed around the new discourse environment and featuring advancements in science and technology, artists express their feelings with installations, performances, photography, videos and even some never-before-seen methods to break through traditional boundaries of art and inspire spectators to brainstorm the close connection between various media and the human body.

April 29 – July 30, 2017 Power Station of Art, Shanghai



A poster for "Listening to Transparency"

Listening to Transparency

A group exhibition featuring audio art themed around transparency, the show includes 44 audio and visual masterpieces by 26 contemporary artists from China and elsewhere. Most exhibits were designed around space and many employ transparent or luminescent materials to express the optical state and visual presentation connoted by the word "transparency."

The entire exhibition connects works shuttling between acousto-optic waves, leading the audience into a space full of colorful shadows, tranquility, noise, complication and change.

May 9 – July 30, 2017 Minsheng Modern Art Gallery, Shanghai

On the Road—China Young Artists Itinerant Exhibition

An extension of "On the Road: Nomination Exhibition of Chinese Young Artists & Forum of Young Art Critics," this show features sculptures that focus on exploring the relationship between art and space.

On display are 42 sculptures by 20 Chinese artists who were born in the 1970s and 1980s to highlight the unique features and aesthetic tendencies of this generation.

May 27 – July 26, 2017 Drchin Contemporary Art Center, Beijing



A poster for "Body Media II"

A poster for "On the Road – China Young Artists Itinerant Exhibition".



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